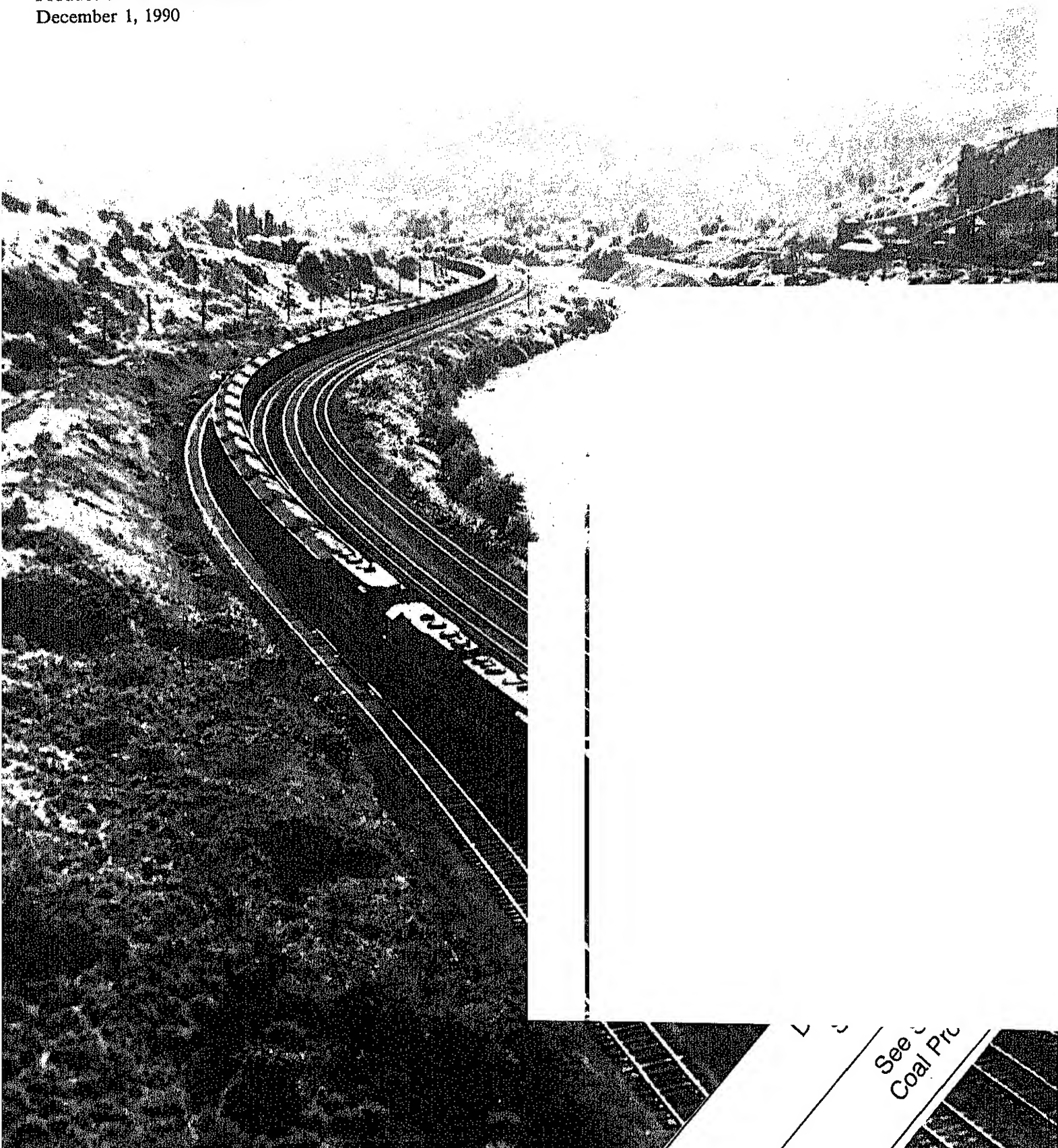




Energy  
Information  
Administration

# Weekly Coal Production

Production for Week Ended:  
December 1, 1990



# Preface

The *Weekly Coal Production (WCP)* provides weekly estimates of U.S. coal production by State. Supplementary data are usually published monthly in two supplements: the Coal Exports and Imports Supplement and the Domestic Market Supplement. The Coal Exports and Imports Supplement contains detailed monthly data on U.S. coal and coke exports and imports. This week's Domestic Market Supplement contains detailed monthly electric utility coal statistics, by Census Division and State, for generation, consumption, stocks, receipts, sulfur content, prices, and the origin and destination of coal shipments. This supplement also contains summary-level, monthly data for all coal-consuming sectors on a quarterly basis.

Preliminary coal production data are published quarterly, based on production data collected using Form EIA-6, "Coal Distribution Report." Based on 1988 data, the coal production estimation error for a quarter at the national level (i.e., the difference between the sum of the weekly estimates for a quarter and the quarterly EIA-6 preliminary data) ranges from 1 percent to 4 percent.

Final coal production data are published annually, based on the EIA-7A coal production survey. Based

on 1988 data, the revision error for a quarter at the national level (i.e., the difference between the EIA-6 preliminary data and the EIA-7A final data) ranges from .02 percent to .08 percent.

This publication is prepared by the Coal Division; Office of Coal, Nuclear, Electric and Alternate Fuels; Energy Information Administration (EIA) to fulfill its data collection and dissemination responsibilities as specified in the Federal Energy Administration Act of 1974 (P.L. 93-275) as amended. *Weekly Coal Production* is intended for use by industry, press, State and local governments, and consumers. Other publications that may be of interest are the quarterly *Coal Distribution*, the *Quarterly Coal Report*, *Coal Production 1989*, and *Coal Data: A Reference*.

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## Photo Credit:

Vic Reinemer,  
American Public Power Association

State Coal Profile

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## Summary

U.S. coal production in the week ended December 1, 1990, as estimated by the Energy Information Administration, totaled 21 million short tons. This was 23 percent more than in the previous week, which included the Thanksgiving Day holiday, and slightly higher than in the comparable week in 1989. Production east of the Mississippi River totaled 13 million short tons, and production west of the Mississippi River totaled 9 million short tons.

For the first 11 months of 1990, coal production was 963 million short tons, 57 million short tons more than a year earlier. About 60 percent of the increase was east of the Mississippi, where West Virginia, Virginia, Pennsylvania and Indiana accounted for nearly 90 percent of the higher level of production. Wyoming contributed over half of the increase in production west of the Mississippi.

Coal consumption at electric utility plants in September 1990 totaled 67 million short tons, 9 percent less than August, due to the typical seasonal decline in demand for electricity. However, utility coal consumption in September 1990 was 6 percent higher than the level in September 1989.

Total coal consumption at electric utility plants for the first 9 months of 1990 was 578 million short tons, nearly 6 million short tons higher than in the comparable period of 1989. The largest regional changes occurred in the East North Central and East South Central Census Divisions, where coal consumption rose 6 million short tons and 3 million short tons, respectively, and in the South Atlantic Census Division, where coal consumption declined by 4 million short tons.

In the East North Central Census Division, Indiana and Illinois were the primary contributors to the increase in electric utility coal consumption, more than offsetting the decrease in Ohio. In Indiana, coal-fired

generation was used to meet a higher demand for electricity. In Illinois, total electricity generation rose only slightly, but coal-fired generation was up by 12 percent because several nuclear-powered units, operated by the Commonwealth Edison Company and the Illinois Power Company, were down for maintenance. Coal-fired generation in Ohio dropped due to lower electricity demand.

In the East South Central Census Division, Kentucky accounted for most of the higher coal consumption, as coal-fired generation was used to meet the increase in electricity demand as well as to compensate for a drop in hydroelectric generation.

In the South Atlantic Census Division, electric utilities in Virginia, West Virginia and North Carolina accounted for most of the decrease in coal consumption. Coal-fired electric generation declined in West Virginia and North Carolina due to lower demand for electricity. In Virginia, total electric generation was up, but coal-fired generation and petroleum-fired generation declined. This decline occurred because the Virginia Electric & Power Company's Surry and North Anna nuclear-powered plants were back in operation, after being out of service during part of the first 9 months of 1989.

Electric utility coal stocks were 10 percent higher than a year ago, with stocks on September 30, 1990, at 149 million short tons, compared with 136 million short tons a year earlier.

Coal receipts at electric utility plants in August 1990 were 71 million short tons, virtually the same as a year earlier. Coal receipts at electric utility plants for the first 8 months totaled 524 million short tons, 6 percent higher than in the comparable period of 1989, reflecting the build-up of coal stocks at electric utilities.

Figure 1. Coal Production

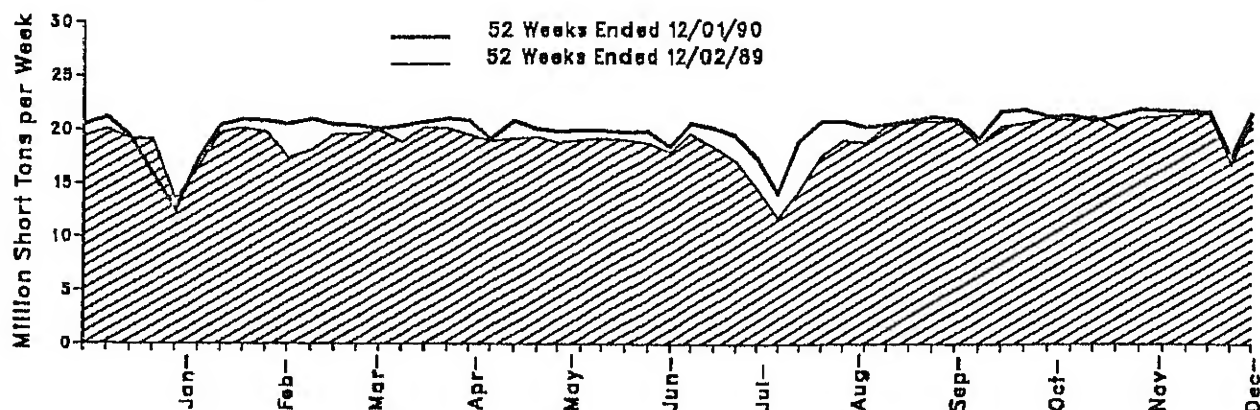


Table 1. Coal Production

Production and Carloadings	Week Ended			52 Weeks Ended		
	12/01/90	11/24/90	12/02/89	12/01/90	12/02/89	Percent Change
<b>Production (Thousand Short Tons)</b>						
Bituminous <sup>1</sup> and Lignite .....	21,182	17,193	20,433	1,030,379	980,306	5.1
Pennsylvania Anthracite .....	71	49	62	3,337	3,366	-.9
U.S. Total .....	21,253	17,242	20,495	1,033,717	983,672	5.1
Railroad Cars Loaded .....	135,347	109,193	131,328	6,662,823	6,392,513	

<sup>1</sup> Includes subbituminous coal.

Notes: 1990 data are preliminary. Total may not equal sum of components because of independent rounding.

Sources: Association of American Railroads, Transportation Division, Weekly Statement CS-54A; Energy Information Administration, Form EIA-6, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; and State mining agency coal production reports.

**Table 2. Coal Production by State**  
(Thousand Short Tons)

Region and State	Week Ended		
	12/01/90	11/24/90	12/02/89
<b>Bituminous Coal<sup>1</sup> and Lignite</b>			
East of the Mississippi .....	12,620	9,026	12,500
Alabama .....	592	443	635
Illinois .....	1,103	1,101	1,188
Indiana .....	947	623	762
Kentucky .....	3,407	2,297	3,543
Kentucky, Eastern .....	2,514	1,657	2,631
Kentucky, Western .....	893	640	912
Maryland .....	61	40	66
Ohio .....	706	471	709
Pennsylvania Bituminous .....	1,299	1,004	1,255
Tennessee .....	145	96	157
Virginia .....	1,013	668	882
West Virginia .....	3,349	2,284	3,303
West of the Mississippi .....	8,562	8,167	7,933
Alaska .....	31	25	43
Arizona .....	260	211	241
Arkansas .....	2	1	2
Colorado .....	435	314	365
Iowa .....	8	6	7
Kansas .....	25	20	25
Louisiana .....	63	41	82
Missouri .....	61	50	74
Montana .....	809	847	797
New Mexico .....	450	187	464
North Dakota .....	666	697	594
Oklahoma .....	34	33	41
Texas .....	1,188	964	1,073
Utah .....	494	374	422
Washington .....	107	87	106
Wyoming .....	3,931	4,309	3,597
Bituminous <sup>1</sup> and Lignite Total .....	21,182	17,193	20,433
Pennsylvania Anthracite .....	71	49	62
U.S. Total .....	21,253	17,242	20,495

<sup>1</sup> Includes subbituminous coal.

Notes: 1990 data are preliminary. Total may not equal sum of components because of independent rounding.

Sources: Association of American Railroads, Transportation Division, Weekly Statement CS-54A; Energy Information Administration, Form EIA-6, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; and State mining agency coal production reports.

**Table 3. Coal Production by State, November 1990**  
(Thousand Short Tons)

Region and State	November 1990	October 1990	November 1989	Year to Date		
				1990	1989	Percent Change
Bituminous Coal <sup>1</sup> and Lignite						
East of the Mississippi .....	52,030	58,032	52,539	586,192	551,987	6.2
Alabama .....	2,423	2,619	2,591	27,208	25,813	5.4
Illinois .....	5,028	5,020	5,023	55,054	54,751	.6
Indiana .....	3,715	3,965	3,122	36,580	31,077	17.7
Kentucky .....	13,645	15,297	14,718	156,348	155,425	.6
Kentucky, Eastern .....	10,023	11,330	10,957	115,333	116,781	-1.2
Kentucky, Western .....	3,621	3,967	3,761	41,014	38,643	6.1
Maryland .....	243	277	281	2,994	3,149	-4.9
Ohio .....	2,934	3,248	2,965	32,699	31,218	4.8
Pennsylvania Bituminous .....	6,065	7,198	5,860	68,324	62,408	9.5
Tennessee .....	570	623	622	6,309	5,948	6.1
Virginia .....	3,877	4,378	3,501	46,369	40,022	15.9
West Virginia .....	13,530	15,407	13,856	154,307	142,178	8.5
West of the Mississippi .....	38,852	37,671	34,426	373,756	351,263	6.4
Alaska .....	129	139	182	1,309	1,427	-8.2
Arizona .....	1,093	1,177	1,029	10,600	11,057	-4.1
Arkansas .....	7	8	9	57	62	-8.3
California .....	-	-	-	13	41	-68.1
Colorado .....	1,750	1,912	1,613	18,307	15,477	18.3
Iowa .....	32	35	31	345	404	-14.5
Kansas .....	105	113	105	918	766	19.8
Louisiana .....	274	318	307	2,985	2,768	7.8
Missouri .....	258	277	317	2,662	3,107	-14.3
Montana .....	3,542	3,340	3,507	34,880	34,660	.6
New Mexico .....	1,832	2,509	1,950	23,110	21,921	5.4
North Dakota .....	2,918	2,752	2,615	28,037	27,268	2.8
Oklahoma .....	157	176	157	1,806	1,599	13.0
Texas .....	4,983	5,365	4,574	53,367	49,950	6.8
Utah .....	1,995	2,171	1,847	21,042	18,241	15.4
Washington .....	449	483	451	4,699	4,654	.9
Wyoming .....	17,329	16,896	15,732	169,621	157,862	7.4
Bituminous <sup>1</sup> and Lignite Total .....	88,882	95,703	86,965	959,949	903,251	6.3
Pennsylvania Anthracite .....	310	354	272	3,115	3,115	.0
U.S. Total .....	89,192	96,058	87,238	983,064	906,366	6.3

<sup>1</sup> Includes subbituminous coal.

Note: 1990 data are preliminary. Total may not equal sum of components because of independent rounding.

Sources: Association of American Railroads, Transportation Division, Weekly Statement CS-54A; Energy Information Administration, Form EIA-6, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; and, State mining agency coal production reports.



**Table 4. Coal Supply and Demand, 1981-1990**  
(Thousand Short Tons)

Year and Month	Production	Consumption	Imports	Exports	Consumer Stocks <sup>1</sup>
1981 .....	823,775	732,827	1,043	112,541	185,274
1982 .....	838,112	706,911	742	106,277	195,254
1983 .....	782,091	736,672	1,271	77,772	168,654
1984 .....	895,921	791,296	1,286	81,483	197,211
1985 .....	883,638	818,049	1,952	92,680	170,234
1986 .....	890,315	804,312	2,212	85,518	175,226
1987 .....	918,762	836,941	1,747	79,607	185,459
1988					
January .....	75,585	78,967	159	4,434	177,581
February .....	77,054	72,166	162	4,482	173,762
March .....	84,251	69,654	221	7,145	175,279
April .....	75,623	64,156	107	8,943	178,232
May .....	74,284	66,511	224	7,905	178,616
June .....	76,738	75,080	257	8,053	173,308
July .....	69,451	81,994	203	8,303	160,130
August .....	88,576	85,302	205	9,322	153,087
September .....	83,596	71,378	29	10,066	154,331
October .....	81,241	70,252	229	9,010	158,766
November .....	83,284	70,011	207	8,338	161,786
December .....	80,584	78,194	131	9,023	158,413
Total .....	950,265	883,664	2,134	95,023	
1989					
January .....	82,331	77,491	66	6,308	153,741
February .....	75,414	73,220	131	6,748	148,124
March .....	89,421	72,735	334	8,375	149,150
April .....	77,456	66,140	158	9,104	154,741
May .....	82,776	68,270	312	9,685	161,059
June .....	78,795	73,361	218	9,657	159,001
July .....	66,601	79,603	375	6,209	145,389
August .....	81,349	80,148	247	8,122	144,959
September .....	85,115	72,393	303	9,661	147,154
October .....	89,873	71,180	160	9,293	153,362
November .....	87,238	71,543	245	9,768	157,790
December .....	74,363	83,410	303	7,888	146,120
Total .....	980,729	889,491	2,851	100,815	
1990					
January .....	90,541	76,650	175	7,447	148,718
February .....	82,017	68,249	268	6,243	153,905
March .....	91,616	71,030	282	8,693	161,433
April .....	83,150	67,398	182	8,590	167,044
May .....	86,497	68,725	144	9,827	174,060
June .....	84,581	74,733	348	9,316	173,673
July .....	81,210	NA	200	9,194	NA
August .....	93,558	NA	120	10,065	NA
September .....	84,645	NA	194	10,238	NA
October .....	96,058	NA	NA	NA	NA

<sup>1</sup> The residential and commercial sector is not included. Stocks are reported as of the last day of the period.

NA Not available.

Note: Total may not equal sum of components because of independent rounding.

Sources: Production: Energy Information Administration (EIA) Form EIA-8, "Coal Distribution Report"; and State mining agency coal production reports. Imports: Bureau of the Census, U.S. Department of Commerce, "Monthly Report IM 145." Exports: Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 522." Consumption and Consumer Stocks: EIA, Form EIA-759, "Monthly Power Plant Report"; Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; and Form EIA-6, "Coal Distribution Report."

**Table 5. Coal Consumption, 1981-1990**  
(Thousand Short Tons)

Year and Month	Electric Utilities	Industrial		Residential and Commercial	Total
		Coke Plants	Other Industrial <sup>1</sup>		
1981 .....	596,797	61,014	67,395	7,421	732,627
1982 .....	593,668	40,908	64,097	8,240	706,911
1983 .....	625,211	37,033	65,980	8,448	736,672
1984 .....	664,399	44,022	73,745	9,130	791,296
1985 .....	693,841	41,056	75,372	7,779	818,049
1986 .....	685,056	36,006	75,583	7,667	804,312
1987 .....	717,894	36,957	75,175	6,914	836,941
1988					
January .....	67,850	3,465	6,826	826	78,967
February .....	61,401	3,297	6,789	678	72,166
March .....	59,758	3,595	6,801	500	69,654
April .....	54,135	3,508	5,904	608	64,156
May .....	56,529	3,686	5,937	358	66,511
June .....	65,343	3,353	5,944	440	75,080
July .....	71,749	3,605	5,982	679	81,994
August .....	75,253	3,418	5,972	658	85,302
September .....	61,540	3,461	5,989	388	71,378
October .....	59,561	3,550	6,694	446	70,252
November .....	59,305	3,403	6,710	594	70,011
December .....	66,948	3,568	6,724	955	78,194
Total .....	756,372	41,910	76,252	7,130	883,664
1989					
January .....	66,619	3,568	6,871	632	77,491
February .....	62,613	3,295	6,819	693	73,220
March .....	61,906	3,722	6,595	512	72,735
April .....	55,929	3,613	6,088	511	66,140
May .....	58,359	3,525	6,050	338	68,270
June .....	63,623	3,368	6,073	296	73,361
July .....	69,705	3,527	5,875	496	79,603
August .....	70,471	3,336	5,891	449	80,148
September .....	62,889	3,320	5,865	318	72,393
October .....	60,541	3,599	6,829	210	71,180
November .....	30,896	3,301	6,815	530	41,543
December .....	72,267	3,195	6,764	1,184	83,410
Total .....	765,920	41,389	76,134	6,167	889,491
1990					
January .....	66,060	3,354	6,524	712	76,650
February .....	58,003	3,025	6,567	655	68,249
March .....	60,616	3,369	6,495	550	71,030
April .....	57,661	3,181	6,024	532	67,398
May .....	59,042	3,317	6,005	361	68,725
June .....	65,167	3,157	6,036	373	74,733
July .....	71,020	NA	NA	NA	NA
August .....	73,200	NA	NA	NA	NA
September .....	66,848	NA	NA	NA	NA

<sup>1</sup> Includes transportation.

NA Not available.

Note: Total may not equal sum of components because of independent rounding.

Sources: Energy Information Administration (EIA) Electric Utilities: Form EIA-759, "Monthly Power Plant Report." Coke Plants: Form EIA-5, "Coke Plant Report - Quarterly." Other Industrial: Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants" and Form EIA-6, "Coal Distribution Report." Residential and Commercial: Form EIA-8, "Coal Distribution Report."

**Table 6. Coal Stocks, 1981-1990**  
(Thousand Short Tons)

Year and Month <sup>1</sup>	Consumers				Producers and Distributors
	Electric Utilities	Coke Plants	Other Industrial <sup>2</sup>	Total	
<b>1981</b> .....	168,893	6,475	9,906	185,274	24,149
<b>1982</b> .....	181,132	4,642	9,479	195,254	36,784
<b>1983</b> .....	155,598	4,346	8,710	168,654	33,931
<b>1984</b> .....	179,727	6,166	11,317	197,211	34,080
<b>1985</b> .....	156,378	3,420	10,438	170,234	33,133
<b>1986</b> .....	181,806	2,992	10,429	175,226	32,093
<b>1987</b> .....	170,797	3,884	10,777	185,459	28,321
<b>1988</b>					
January .....	163,561	3,942	10,058	177,561	31,135
February .....	160,424	4,000	9,339	173,762	33,950
March .....	162,603	4,057	8,619	175,279	36,764
April .....	165,750	3,959	8,523	178,232	36,536
May .....	166,328	3,861	8,427	178,616	36,307
June .....	161,215	3,763	8,331	173,308	36,079
July .....	148,234	3,467	8,428	160,130	34,506
August .....	141,389	3,172	8,526	153,087	32,933
September .....	142,830	2,877	8,624	154,331	31,360
October .....	147,130	2,964	8,672	158,766	31,046
November .....	150,018	3,051	8,720	161,786	30,732
December .....	146,507	3,137	8,768	158,413	30,418
<b>1989</b>					
January .....	142,403	3,264	8,073	153,741	32,076
February .....	137,354	3,391	7,378	148,124	33,734
March .....	138,949	3,518	6,683	149,150	35,392
April .....	144,596	3,466	6,679	154,741	33,759
May .....	150,970	3,413	6,675	161,059	32,127
June .....	148,968	3,361	6,671	159,001	30,494
July .....	134,859	3,476	7,054	145,389	29,846
August .....	133,932	3,591	7,436	144,959	29,397
September .....	135,629	3,707	7,818	147,154	28,848
October .....	142,270	3,428	7,666	153,362	28,899
November .....	147,131	3,145	7,515	157,790	28,949
December .....	135,894	2,864	7,363	146,120	29,000
<b>1990</b>					
January .....	138,358	3,123	7,237	148,718	30,945
February .....	143,413	3,382	7,110	153,905	32,891
March .....	150,808	3,641	6,984	161,433	34,838
April .....	156,318	3,600	7,128	167,044	35,436
May .....	163,233	3,559	7,268	174,060	36,035
June .....	162,745	3,518	7,410	173,673	36,635
July .....	154,979	NA	NA	NA	NA
August .....	151,896	NA	NA	NA	NA
September .....	149,120	NA	NA	NA	NA

<sup>1</sup> Reported as of the last day of the period.

<sup>2</sup> Manufacturing plants only.

NA Not available.

Note: Total may not equal sum of components because of independent rounding.

Sources: Energy Information Administration (EIA) Electric Utilities: Form EIA-759, "Monthly Power Plant Report." Coke Plants: Form EIA-5, "Coke Plant Report - Quarterly." Other Industrial: Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants." Producers and Distributors: Form EIA-6, "Coal Distribution Report."

**Table 7. Coal Statistics for Electric Utilities, 1981-1990**

Year and Month	Receipts				Consumption (thousand short tons)	Generation		Stocks (thousand short tons)
	Quantity (thousand short tons)	Percent Contract	Price (cents per MM Btu)	Quality (lbs. sulfur per MM Btu)		GWh <sup>1</sup>	Percent Coal	
<b>1981</b> .....	579,374	88.9	153	1.43	596,787	1,203,203	52.4	168,893
<b>1982</b> .....	601,427	90.4	165	1.42	593,666	1,192,004	53.2	181,132
<b>1983</b> .....	592,728	88.3	166	1.39	625,211	1,259,424	54.5	155,598
<b>1984</b> .....	684,111	85.5	166	1.39	664,399	1,341,681	55.5	179,727
<b>1985</b> .....	666,743	88.9	165	1.32	693,841	1,402,128	56.8	156,376
<b>1986</b> .....	686,964	87.5	158	1.32	685,056	1,385,831	55.7	161,806
<b>1987</b> .....	721,298	84.6	151	1.31	717,894	1,463,781	56.9	170,797
<b>1988</b>								
January .....	58,026	85.7	147	1.32	67,850	137,845	57.9	163,561
February .....	58,871	86.7	149	1.27	61,401	126,267	58.2	160,424
March .....	59,021	88.8	149	1.27	58,758	120,034	56.1	162,603
April .....	56,136	87.9	150	1.24	54,135	109,135	55.7	165,750
May .....	57,920	87.9	150	1.25	56,529	115,195	55.3	166,328
June .....	59,337	87.1	146	1.25	65,343	132,268	56.8	161,215
July .....	58,989	86.9	148	1.21	71,749	144,301	56.0	148,234
August .....	68,698	86.4	145	1.24	75,253	152,377	56.9	141,389
September .....	63,103	85.2	145	1.27	61,540	124,410	56.5	142,830
October .....	63,574	86.3	146	1.29	59,581	121,339	57.6	147,130
November .....	62,015	84.3	146	1.28	59,305	121,054	57.8	150,016
December .....	63,487	82.6	142	1.27	66,948	136,427	58.6	146,507
<b>Total</b> .....	727,775	86.3	147	1.26	758,372	1,540,853	57.0	
<b>1989</b>								
January .....	62,443	82.6	143	1.28	66,619	134,968	58.1	142,403
February .....	56,634	82.9	145	1.29	62,613	127,194	57.9	137,354
March .....	63,218	83.4	144	1.28	61,906	126,706	55.9	138,949
April .....	62,076	82.2	144	1.27	55,929	115,271	55.5	144,596
May .....	64,786	84.0	145	1.30	58,359	119,956	54.1	150,970
June .....	61,272	83.9	145	1.26	63,623	128,454	54.6	148,968
July .....	55,429	83.2	144	1.22	69,705	138,467	53.9	134,859
August .....	70,147	82.9	145	1.29	70,471	141,710	54.9	133,932
September .....	64,539	81.1	146	1.27	62,889	126,730	55.9	135,629
October .....	66,578	80.7	145	1.29	60,541	122,212	55.7	142,270
November .....	65,570	80.7	144	1.28	60,896	124,154	56.7	147,131
December .....	60,515	81.9	143	1.27	72,267	147,030	56.8	135,894
<b>Total</b> .....	753,217	82.4	144	1.28	765,820	1,551,852	55.8	
<b>1990</b>								
January .....	67,637	82.7	145	1.30	66,060	132,496	55.9	138,358
February .....	62,280	82.1	146	1.30	58,003	115,898	54.5	143,413
March .....	67,518	83.1	145	1.31	60,616	122,958	54.5	150,808
April .....	63,888	82.9	147	1.30	57,881	117,111	55.6	156,318
May .....	64,958	83.1	148	1.30	59,042	119,644	53.8	163,233
June .....	63,604	82.4	148	1.29	65,167	132,459	53.2	162,745
July .....	63,427	82.8	144	1.26	71,020	144,232	54.2	154,979
August .....	70,571	83.5	145	1.29	73,200	146,058	54.8	151,996
September .....	NA	NA	NA	NA	66,948	135,248	56.9	149,120

<sup>1</sup> Gigawatt-hours

NA Not available.

Note: MM Btu represents million Btu.

Sources: Receipts: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." Consumption, Stocks and Generation: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."

**Table 8. Coal-Fired Net Generation, September 1990**  
(Gigawatthours)

Census Division and State	September 1990	September 1989	Percent Change	Year to Date				
				Coal Generation			Percent of Total Generation	
				1990	1989	Percent Change	1990	1989
<b>New England</b> .....	1,598	1,376	16.1	12,074	12,476	-3.2	17.0	17.4
Connecticut .....	210	218	-3.6	1,855	1,509	22.9	7.6	5.8
Maine .....	-	-	-	-	-	-	-	-
Massachusetts .....	1,086	878	23.6	8,218	8,632	-4.8	28.1	30.7
New Hampshire .....	302	280	7.8	2,001	2,334	-14.3	28.3	42.3
Rhode Island .....	*	*	NM	*	*	NM	*	*
Vermont .....	-	-	-	-	-	-	-	-
<b>Middle Atlantic</b> .....	11,084	11,320	-2.1	101,907	102,662	-.7	40.5	42.6
New Jersey .....	561	562	-.2	5,573	6,392	-12.8	21.3	20.4
New York .....	2,196	2,021	8.6	18,926	18,712	1.1	19.3	19.3
Pennsylvania .....	8,328	8,736	-4.7	77,409	77,558	-.2	60.9	69.1
<b>East North Central</b> .....	29,379	28,253	4.0	272,039	263,394	3.3	73.8	73.2
Illinois .....	4,214	4,203	.3	40,886	38,506	12.0	42.7	38.4
Indiana .....	7,964	7,037	13.2	73,035	63,690	14.7	98.3	98.6
Michigan .....	5,267	5,307	-.8	48,953	50,043	-2.2	70.2	73.2
Ohio .....	9,365	9,272	1.0	85,249	89,750	-5.0	80.1	91.0
Wisconsin .....	2,568	2,433	5.5	23,917	23,405	2.2	70.4	70.9
<b>West North Central</b> .....	13,540	12,186	11.1	122,051	119,249	2.3	74.9	74.8
Iowa .....	2,084	1,806	15.4	18,681	18,450	1.3	86.4	84.9
Kansas .....	2,021	1,723	17.3	18,187	17,297	5.1	71.4	66.9
Minnesota .....	2,148	2,126	.9	19,055	18,813	1.3	65.1	68.8
Missouri .....	4,382	3,836	14.2	35,554	37,258	-4.6	79.3	84.4
Nebraska .....	837	830	.8	10,087	8,419	19.8	61.0	55.8
North Dakota .....	1,818	1,629	11.6	19,857	17,197	8.5	93.0	92.0
South Dakota .....	252	235	7.0	1,830	1,815	.8	36.1	32.3
<b>South Atlantic</b> .....	29,898	27,422	9.0	241,356	251,151	-3.9	59.5	61.7
Delaware .....	435	443	-1.9	3,579	3,802	-5.8	64.9	59.6
District of Columbia .....	-	-	-	-	-	-	-	-
Florida .....	5,342	5,822	-5.0	45,040	45,001	.1	47.4	47.8
Georgia .....	6,654	5,727	16.2	51,253	49,086	4.4	69.3	69.7
Maryland .....	1,935	2,033	-4.8	17,703	18,168	-2.5	76.8	64.9
North Carolina .....	4,940	4,089	20.8	34,617	38,003	-8.9	55.7	58.0
South Carolina .....	1,982	1,821	8.8	17,608	18,728	-6.0	33.9	37.0
Virginia .....	1,974	1,810	22.6	14,712	18,734	-21.5	40.4	60.4
West Virginia .....	6,634	6,076	9.2	58,843	59,631	-4.7	99.1	98.0
<b>East South Central</b> .....	16,733	14,184	18.0	137,346	131,002	4.8	72.7	72.1
Alabama .....	5,166	4,414	17.1	39,552	39,472	.2	67.6	68.0
Kentucky .....	5,933	5,435	9.2	53,740	49,548	8.5	95.7	93.9
Mississippi .....	989	883	12.0	7,598	6,820	11.4	39.7	43.1
Tennessee .....	4,645	3,452	34.5	36,456	35,182	3.7	66.1	64.0
<b>West South Central</b> .....	16,050	15,150	5.9	134,972	135,428	-.3	46.8	48.7
Arkansas .....	1,848	1,445	27.9	13,793	12,863	7.2	48.3	51.3
Louisiana .....	1,723	1,528	12.8	12,778	14,436	-11.5	28.9	34.9
Oklahoma .....	2,188	1,828	18.6	18,872	17,752	6.3	53.8	52.6
Texas .....	10,310	10,350	-.4	88,529	90,375	-.9	49.8	50.7
<b>Mountain</b> .....	16,082	15,913	.9	139,553	138,438	2.3	78.1	77.2
Arizona .....	2,749	2,790	-1.5	24,525	24,183	1.4	53.8	58.0
Colorado .....	2,339	2,437	-4.0	22,219	21,808	1.9	94.2	90.4
Idaho .....	-	-	-	-	-	-	-	-
Montana .....	1,294	1,487	-11.8	10,463	11,659	-10.3	56.6	62.6
Nevada .....	1,549	1,228	26.1	10,870	12,133	-10.4	76.4	77.6
New Mexico .....	2,041	2,493	-18.1	18,617	18,903	3.8	89.9	89.6
Utah .....	2,864	2,862	.1	23,604	21,969	7.4	97.7	97.1
Wyoming .....	3,427	2,936	20.8	28,255	25,783	8.6	97.9	97.6
<b>Pacific</b> .....	906	925	-2.0	5,608	6,680	-15.8	2.7	3.2
California .....	-	-	-	-	-	-	-	-
Oregon .....	181	*	NM	248	440	-43.6	.7	1.3
Washington .....	698	905	-22.9	5,121	6,002	-14.7	6.7	9.3
Alaska .....	27	20	38.5	238	218	9.1	7.3	6.8
Hawaii .....	-	-	-	-	-	-	-	-
<b>U.S. Total</b> .....	135,248	126,730	6.7	1,166,905	1,158,456	.7	54.8	55.6

\* For quantity data, the absolute value of the number is less than 0.5 gigawatthours. For percentage calculations, the absolute value of the number is less than 0.05 percent.

NM Percent change calculation not meaningful as value is greater than 500.

Notes: Negative generation denotes that electric power consumed for plant use exceeds gross generation. Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."

**Table 9. Coal Consumption at Electric Utility Plants, September 1990**  
(Thousand Short Tons)

Census Division and State	September 1990	August 1990	September 1989	Year to Date		
				1990	1989	Percent Change
New England .....	603	571	512	4,591	4,699	-2.3
Connecticut .....	84	87	84	757	606	24.9
Massachusetts .....	402	369	325	3,061	3,212	-4.7
New Hampshire .....	117	115	103	773	881	-12.2
Rhode Island .....	*	*	*	*	*	-
Middle Atlantic .....	4,505	4,949	4,583	41,323	41,756	-1.0
New Jersey .....	220	316	222	2,152	2,484	-13.4
New York .....	885	946	812	7,654	7,515	1.9
Pennsylvania .....	3,400	3,687	3,549	31,516	31,757	-.8
East North Central .....	13,876	15,473	13,362	129,213	123,222	4.9
Illinois .....	2,159	2,548	2,147	20,847	18,324	13.8
Indiana .....	3,913	4,357	3,471	36,251	31,098	16.6
Michigan .....	2,396	2,584	2,402	22,333	22,134	.9
Ohio .....	3,951	4,309	3,996	38,315	38,462	-5.6
Wisconsin .....	1,456	1,675	1,346	13,467	13,204	2.0
West North Central .....	8,489	9,659	7,694	76,937	74,541	3.2
Iowa .....	1,264	1,491	1,098	11,514	11,133	3.4
Kansas .....	1,286	1,408	1,105	11,502	11,144	3.2
Minnesota .....	1,430	1,464	1,400	12,049	11,889	1.5
Missouri .....	2,145	2,399	1,923	17,718	18,457	-4.0
Nebraska .....	534	772	531	6,381	5,322	19.9
North Dakota .....	1,595	1,910	1,415	16,032	14,877	7.8
South Dakota .....	236	217	222	1,740	1,739	*
South Atlantic .....	11,922	12,929	11,051	95,951	100,289	-4.3
Delaware .....	181	176	189	1,499	1,600	-6.3
Florida .....	2,185	2,384	2,337	18,276	18,436	-.9
Georgia .....	2,788	3,067	2,356	20,864	20,119	4.2
Maryland .....	740	799	784	6,800	6,957	-2.3
North Carolina .....	1,889	1,984	1,594	13,360	14,652	-8.8
South Carolina .....	793	1,002	730	7,048	7,438	-5.3
Virginia .....	767	856	647	5,786	7,482	-22.7
West Virginia .....	2,579	2,662	2,414	22,221	23,606	-5.9
East South Central .....	7,126	7,810	6,117	58,194	55,334	5.2
Alabama .....	2,126	2,437	1,866	16,358	16,175	1.1
Kentucky .....	2,639	2,941	2,419	23,573	21,758	8.3
Mississippi .....	412	507	359	3,120	2,796	11.6
Tennessee .....	1,948	1,925	1,474	15,143	14,605	3.7
West South Central .....	10,959	12,078	10,468	92,522	93,996	-1.6
Arkansas .....	1,146	1,203	881	8,518	7,831	8.8
Louisiana .....	1,124	1,245	1,001	8,839	9,430	-8.4
Oklahoma .....	1,280	1,467	1,111	11,114	10,638	4.5
Texas .....	7,409	8,160	7,472	64,251	66,097	-2.8
Mountain .....	8,818	9,166	8,485	75,177	73,873	1.8
Arizona .....	1,380	1,545	1,390	12,281	12,127	1.3
Colorado .....	1,270	1,403	1,311	11,915	11,666	2.1
Montana .....	814	584	914	6,604	7,384	-10.8
Nevada .....	865	937	597	5,627	5,919	-4.9
New Mexico .....	1,204	1,367	1,441	11,440	11,542	-.9
Utah .....	1,153	1,186	1,139	10,129	9,543	6.1
Wyoming .....	2,121	2,144	1,693	17,181	15,692	9.5
Pacific .....	652	566	620	3,810	4,406	-13.5
Oregon .....	177	55	*	232	306	-24.0
Washington .....	450	491	579	3,366	3,679	-13.2
Alaska .....	24	20	41	211	222	-4.9
U.S. Total .....	66,848	73,200	62,889	577,716	572,115	1.0

\* For quantity data, the absolute value of the number is less than 0.5 thousand short tons. For percentage calculations, the absolute value of the number is less than 0.05 percent.

Note: Total may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."

**Table 10. Coal Stocks at Electric Utility Plants, September 1990**  
(Thousand Short Tons)

Census Division and State	September 30, 1990	August 31, 1990	September 30, 1989	Percent Change September 30: 1990 versus 1989
<b>New England</b> .....	<b>1,244</b>	<b>1,392</b>	<b>1,087</b>	<b>14.5</b>
Connecticut .....	142	149	129	10.0
Massachusetts .....	724	844	733	-1.2
New Hampshire .....	351	372	197	78.0
Rhode Island .....	28	28	28	"
<b>Middle Atlantic</b> .....	<b>16,369</b>	<b>15,863</b>	<b>13,166</b>	<b>24.3</b>
New Jersey .....	723	720	528	36.9
New York .....	1,568	1,561	1,210	29.6
Pennsylvania .....	14,079	13,582	11,429	23.2
<b>East North Central</b> .....	<b>38,075</b>	<b>37,155</b>	<b>35,279</b>	<b>7.9</b>
Illinois .....	6,988	7,141	9,016	-22.5
Indiana .....	9,773	9,367	7,639	27.9
Michigan .....	8,236	7,676	7,872	4.6
Ohio .....	8,173	9,097	6,303	45.5
Wisconsin .....	3,904	3,875	4,449	-12.2
<b>West North Central</b> .....	<b>18,882</b>	<b>19,408</b>	<b>20,092</b>	<b>-6.0</b>
Iowa .....	4,037	3,876	4,102	-1.6
Kansas .....	3,241	3,457	3,598	-0.9
Minnesota .....	2,005	2,055	2,142	-6.4
Missouri .....	4,670	5,017	4,333	7.8
Nebraska .....	1,585	1,513	1,795	-11.2
North Dakota .....	3,073	3,197	3,846	-20.1
South Dakota .....	272	291	285	-4.7
<b>South Atlantic</b> .....	<b>25,721</b>	<b>26,802</b>	<b>19,468</b>	<b>32.1</b>
Delaware .....	355	461	216	64.7
Florida .....	4,651	4,802	4,218	10.3
Georgia .....	5,122	5,638	4,222	21.3
Maryland .....	1,911	1,765	1,209	58.1
North Carolina .....	3,909	4,385	2,796	38.8
South Carolina .....	1,773	1,829	1,467	20.0
Virginia .....	1,471	1,414	1,096	34.2
West Virginia .....	6,530	6,509	4,243	53.9
<b>East South Central</b> .....	<b>14,787</b>	<b>15,231</b>	<b>11,682</b>	<b>26.6</b>
Alabama .....	3,804	4,051	3,779	.7
Kentucky .....	6,891	6,761	4,164	65.5
Mississippi .....	612	710	693	-11.7
Tennessee .....	3,480	3,708	3,048	14.2
<b>West South Central</b> .....	<b>14,268</b>	<b>16,793</b>	<b>16,521</b>	<b>-13.8</b>
Arkansas .....	1,479	1,828	2,730	-45.8
Louisiana .....	2,304	2,225	2,267	1.6
Oklahoma .....	2,825	2,912	2,992	-5.6
Texas .....	7,660	9,028	8,531	-10.2
<b>Mountain</b> .....	<b>17,510</b>	<b>17,013</b>	<b>16,719</b>	<b>4.7</b>
Arizona .....	2,804	2,702	3,526	-20.5
Colorado .....	3,613	3,622	4,009	-9.8
Montana .....	835	896	829	.8
Nevada .....	1,264	1,179	1,045	21.0
New Mexico .....	1,413	1,371	1,208	17.0
Utah .....	3,869	3,728	3,153	22.7
Wyoming .....	3,711	3,515	2,949	25.8
<b>Pacific</b> .....	<b>2,263</b>	<b>2,339</b>	<b>1,617</b>	<b>39.9</b>
Oregon .....	648	646	480	35.0
Washington .....	1,614	1,691	1,134	42.4
Alaska .....	1	2	4	-65.4
<b>U.S. Total</b> .....	<b>149,120</b>	<b>151,986</b>	<b>135,829</b>	<b>9.9</b>

\* For quantity data, the absolute value of the number is less than 0.5 thousand short tons. For percentage calculations, the absolute value of the number is less than 0.05 percent.

Note: Total may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."

**Table 11. Coal Receipts at Electric Utility Plants, August 1990**  
(Thousand Short Tons)

Census Division and State	August 1990	July 1990	August 1989	Year to Date		
				1990	1989	Percent Change
New England .....	542	427	409	4,349	4,080	6.6
Connecticut .....	76	63	73	686	536	28.0
Massachusetts .....	361	297	216	2,860	2,928	-2.3
New Hampshire .....	105	67	120	804	616	30.5
Middle Atlantic .....	5,104	4,195	5,221	39,658	36,646	8.2
New Jersey .....	253	75	329	2,006	2,232	-10.2
New York .....	843	705	898	6,973	6,516	7.0
Pennsylvania .....	4,008	3,415	3,994	30,679	27,897	10.0
East North Central .....	16,278	14,324	15,858	115,240	103,765	11.1
Illinois .....	2,277	2,108	2,140	17,710	16,287	8.7
Indiana .....	4,377	3,889	3,817	32,973	25,302	30.3
Michigan .....	3,503	2,675	3,208	18,229	17,587	3.7
Ohio .....	4,405	4,184	4,882	34,494	32,855	5.0
Wisconsin .....	1,716	1,467	1,711	11,834	11,733	.9
West North Central .....	9,033	8,475	9,193	69,210	67,130	3.1
Iowa .....	1,363	1,308	1,361	10,193	9,573	6.5
Kansas .....	1,341	1,336	1,255	10,636	10,227	4.0
Minnesota .....	1,270	1,134	1,653	10,900	10,233	6.5
Missouri .....	2,257	1,908	2,223	18,229	16,439	-1.3
Nebraska .....	686	813	678	5,719	4,952	15.5
North Dakota .....	1,912	1,780	1,831	14,192	14,353	-1.1
South Dakota .....	205	197	191	1,340	1,353	-1.0
South Atlantic .....	12,217	10,274	11,778	89,912	84,629	6.2
Delaware .....	238	165	130	1,519	1,191	27.5
Florida .....	2,081	1,857	1,810	16,438	15,530	5.8
Georgia .....	2,438	2,575	2,352	18,517	16,978	9.1
Maryland .....	943	727	971	6,768	5,987	13.0
North Carolina .....	1,844	1,348	1,857	13,032	11,894	8.6
South Carolina .....	896	825	1,043	6,239	6,445	-3.2
Virginia .....	690	635	827	5,024	6,554	-23.3
West Virginia .....	3,087	2,142	2,789	22,374	20,048	11.6
East South Central .....	6,844	6,334	6,308	55,674	48,957	13.7
Alabama .....	1,799	1,783	1,845	14,630	14,009	4.4
Kentucky .....	2,994	2,635	2,734	24,279	20,280	19.7
Mississippi .....	330	308	244	2,672	2,287	16.9
Tennessee .....	1,721	1,608	1,486	14,092	12,381	13.8
West South Central .....	11,138	10,912	11,465	80,102	82,299	-2.7
Arkansas .....	999	1,082	1,198	7,048	7,646	-7.8
Louisiana .....	1,110	943	1,197	7,120	7,964	-10.6
Oklahoma .....	1,242	1,170	1,310	9,718	8,784	-5.5
Texas .....	7,787	7,737	7,760	58,217	58,925	-1.2
Mountain .....	8,893	7,951	9,479	65,951	64,765	1.8
Arizona .....	1,292	1,075	1,542	10,130	10,055	.7
Colorado .....	1,391	1,225	1,420	10,322	10,502	-1.7
Montana .....	633	598	1,021	5,894	6,508	-9.4
Nevada .....	650	772	739	4,929	4,945	-.3
New Mexico .....	1,391	1,416	1,416	10,272	9,816	4.6
Utah .....	1,393	952	1,421	9,430	8,725	8.1
Wyoming .....	2,144	1,916	1,919	14,974	14,215	5.3
Pacific .....	523	534	435	3,787	3,745	1.1
Oregon .....	122	101	-	223	-	-
Washington .....	401	433	435	3,564	3,745	-4.8
<b>U.S. Total .....</b>	<b>70,571</b>	<b>63,427</b>	<b>70,147</b>	<b>523,863</b>	<b>496,015</b>	<b>5.6</b>

Note: Total may not equal sum of components because of independent rounding.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."



**Table 12. Quality and Price of Coal Receipts at Electric Utility Plants,  
August 1990**

Census Division and State	August 1990		August 1989		Year to Date					
	Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu	1990		1989		Percent Change	
					Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu
<b>New England</b> .....	1.04	182	0.99	177	0.96	180	0.96	168	0.0	7.0
Connecticut .....	.38	222	.41	209	.41	212	.39	216	4.8	-2.0
Massachusetts .....	.94	177	.96	166	.96	173	.94	159	2.8	8.5
New Hampshire .....	1.82	173	1.39	176	1.40	178	1.54	169	-9.0	5.4
<b>Mid Atlantic</b> .....	1.71	153	1.54	149	1.65	155	1.57	148	4.6	4.5
New Jersey .....	.88	179	.88	178	.84	179	.86	174	-2.4	2.8
New York .....	1.49	159	1.32	158	1.45	161	1.33	157	8.4	2.7
Pennsylvania .....	1.82	150	1.66	145	1.75	151	1.69	144	3.4	5.4
<b>East North Central</b> .....	1.58	149	1.66	155	1.65	152	1.69	155	-2.0	-1.7
Illinois .....	1.96	175	2.01	178	1.93	175	1.86	182	3.9	-3.4
Indiana .....	1.87	134	2.08	134	1.91	138	2.16	137	-11.4	1.0
Michigan .....	.61	156	.56	173	.63	164	.59	177	7.2	-7.4
Ohio .....	2.07	151	2.08	153	2.04	152	2.08	147	-1.9	3.2
Wisconsin .....	.90	133	.98	146	.85	136	.88	145	-4.1	-5.9
<b>West North Central</b> .....	1.20	113	1.16	116	1.12	115	1.16	116	-3.3	-.8
Iowa .....	.96	120	.94	122	.79	113	.86	124	-8.1	-8.6
Kansas .....	.74	127	.76	125	.69	125	.70	123	-.9	2.1
Minnesota .....	.65	122	.55	116	.57	132	.62	127	-7.7	4.1
Missouri .....	1.95	132	2.05	140	1.97	137	2.03	134	-3.1	2.0
Nebraska .....	.41	78	.41	86	.42	77	.42	87	.1	-11.4
North Dakota .....	1.27	67	1.13	68	1.23	69	1.10	69	11.3	-1.3
South Dakota .....	1.58	112	1.41	122	1.52	116	1.47	124	3.1	-6.8
<b>South Atlantic</b> .....	1.23	167	1.19	168	1.23	168	1.20	164	2.8	2.1
Delaware .....	.74	180	.73	185	.73	182	.78	180	-7.0	1.5
Florida .....	1.38	182	1.39	182	1.42	185	1.42	179	.1	3.6
Georgia .....	1.37	175	1.39	181	1.39	173	1.36	174	2.1	-.8
Maryland .....	1.21	163	1.08	165	1.12	165	1.08	160	3.6	2.8
North Carolina .....	.76	178	.74	179	.76	179	.73	176	3.8	1.8
South Carolina .....	.96	170	.91	170	.94	172	.89	172	5.5	.0
Virginia .....	.75	152	.75	157	.75	156	.72	152	4.2	2.2
West Virginia .....	1.54	149	1.50	145	1.51	147	1.50	140	.9	4.3
<b>East South Central</b> .....	1.80	145	1.96	141	1.79	144	1.82	143	-1.8	.6
Alabama .....	1.19	186	1.50	182	1.24	186	1.35	187	-8.1	-.1
Kentucky .....	2.34	121	2.52	112	2.28	119	2.34	113	-3.5	5.2
Mississippi .....	1.20	167	1.40	165	1.34	164	1.22	170	10.3	-3.4
Tennessee .....	1.67	137	1.65	138	1.68	136	1.65	135	1.0	1.2
<b>West South Central</b> .....	.86	147	.84	148	.84	148	.81	147	4.4	.6
Arkansas .....	.37	154	.38	162	.39	164	.39	163	.9	.9
Louisiana .....	.60	167	.54	165	.61	169	.60	162	.9	4.4
Oklahoma .....	.50	141	.53	140	.53	139	.49	136	7.8	2.1
Texas .....	1.04	144	1.05	141	1.01	145	.97	145	3.9	.0
<b>Mountain</b> .....	.55	112	.57	109	.56	113	.55	112	.4	1.4
Arizona .....	.48	146	.46	133	.46	145	.46	139	.8	4.9
Colorado .....	.39	104	.39	108	.39	107	.38	107	4.1	.6
Montana .....	.71	53	.80	53	.73	65	.81	55	-9.9	18.1
Nevada .....	.46	152	.49	141	.47	152	.47	142	.9	7.0
New Mexico .....	.84	129	.88	121	.87	130	.88	125	.8	3.9
Utah .....	.42	111	.41	120	.44	113	.43	125	2.5	-9.8
Wyoming .....	.63	84	.63	83	.61	84	.59	85	2.6	-1.6
<b>Pacific</b> .....	.82	143	.92	156	.84	157	.82	155	1.8	1.3
Oregon .....	.36	111	-	-	.37	110	-	-	-	-
Washington .....	.96	153	.92	156	.87	159	.82	155	5.4	3.2
<b>U.S. Total</b> .....	1.29	145	1.29	145	1.29	146	1.27	144	1.4	1.0

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 13. Quality and Price of Contract Coal Receipts at Electric Utility Plants, August 1990**

Census Division and State	August 1990		August 1989		Year to Date					
	Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu	1990		1989		Percent Change	
					Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu
<b>New England</b> .....	0.98	188	0.79	180	0.98	180	0.84	169	13.9	8.4
Connecticut .....	.38	222	.41	209	.41	213	.39	221	4.5	-3.7
Massachusetts .....	.96	175	.98	165	.99	169	.94	158	5.2	7.0
New Hampshire .....	1.76	174	-	-	1.44	177	-	-	-	-
<b>Mid Atlantic</b> .....	1.78	158	1.61	155	1.72	158	1.64	154	4.5	2.7
New Jersey .....	.91	179	.93	177	.84	178	.91	175	-8.2	1.8
New York .....	1.48	159	1.25	165	1.46	162	1.29	162	12.6	-5
Pennsylvania .....	1.91	154	1.75	151	1.85	155	1.78	150	3.7	3.6
<b>East North Central</b> .....	1.63	156	1.67	164	1.70	160	1.70	164	-.1	-2.4
Illinois .....	2.00	182	2.04	183	2.00	184	1.90	187	5.0	-1.7
Indiana .....	1.91	137	2.13	139	1.94	142	2.19	143	-11.4	-7
Michigan .....	.60	159	.55	178	.61	187	.58	181	4.9	-7.4
Ohio .....	2.25	166	2.21	169	2.17	166	2.21	163	-1.9	1.8
Wisconsin .....	.96	139	1.01	147	.92	142	.91	145	.9	-1.8
<b>West North Central</b> .....	1.20	113	1.13	116	1.11	116	1.13	117	-1.9	-.5
Iowa .....	1.04	126	.87	129	.84	122	.76	128	10.4	-4.9
Kansas .....	.47	128	.68	128	.45	125	.56	125	-19.0	.0
Minnesota .....	.83	121	.53	115	.55	133	.61	127	-9.1	4.8
Missouri .....	2.05	133	2.06	141	2.08	140	2.08	137	.0	2.4
Nebraska .....	.41	78	.42	89	.41	80	.43	89	-3.6	-10.7
North Dakota .....	1.27	67	1.13	68	1.23	69	1.10	70	11.1	-2.0
South Dakota .....	1.58	112	1.41	122	1.52	116	1.47	124	3.1	-6.8
<b>South Atlantic</b> .....	1.26	175	1.21	176	1.24	175	1.20	173	3.3	1.4
Delaware .....	.73	183	.73	185	.73	183	.77	182	-5.8	.6
Florida .....	1.37	192	1.28	190	1.35	193	1.29	189	4.2	2.3
Georgia .....	1.58	186	1.46	191	1.45	180	1.41	182	2.2	-1.0
Maryland .....	1.18	163	1.21	164	1.13	166	1.15	162	-2.0	2.5
North Carolina .....	.76	184	.74	183	.78	183	.73	180	3.7	1.7
South Carolina .....	.95	177	.92	180	.94	177	.90	180	4.1	-1.5
Virginia .....	.82	158	.77	153	.77	157	.73	153	5.3	2.5
West Virginia .....	1.57	158	1.53	157	1.58	157	1.53	153	3.5	3.1
<b>East South Central</b> .....	1.88	150	1.96	153	1.87	152	1.82	156	2.8	-2.8
Alabama .....	1.13	200	1.28	200	1.10	203	1.25	200	-11.6	1.8
Kentucky .....	2.61	122	2.84	118	2.62	121	2.64	122	-1.0	-1.0
Mississippi .....	1.03	170	1.25	171	1.12	170	1.08	177	3.6	-3.7
Tennessee .....	1.69	141	1.68	143	1.72	140	1.70	140	.9	.3
<b>West South Central</b> .....	.87	148	.84	147	.85	149	.80	144	6.6	3.6
Arkansas .....	.37	154	.38	162	.39	164	.39	163	.9	.9
Louisiana .....	.60	167	.54	165	.61	169	.59	163	2.2	3.9
Oklahoma .....	.49	143	.47	144	.51	142	.48	137	6.3	3.1
Texas .....	1.05	145	1.05	141	1.03	145	.99	139	4.8	4.9
<b>Mountain</b> .....	.56	114	.57	111	.56	115	.56	113	.3	2.0
Arizona .....	.48	146	.46	133	.46	145	.46	138	.7	4.9
Colorado .....	.39	108	.39	110	.39	109	.38	108	4.5	.5
Montana .....	.71	53	.80	53	.73	65	.81	55	-9.9	18.1
Nevada .....	.46	152	.49	141	.47	152	.47	142	.8	7.0
New Mexico .....	.84	129	.88	121	.87	130	.86	125	.8	3.9
Utah .....	.41	112	.41	122	.43	114	.42	127	2.4	-10.2
Wyoming .....	.64	87	.66	85	.63	86	.61	87	2.2	-.8
<b>Pacific</b> .....	.82	143	.88	158	.89	160	.88	161	.9	-.8
Oregon .....	.38	111	-	-	.37	110	-	-	-	-
Washington .....	.96	153	.96	158	.93	163	.88	161	5.1	1.4
<b>U.S. Total</b> .....	1.30	148	1.25	148	1.29	150	1.25	148	3.2	.9

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 14. Quality and Price of Spot Coal Receipts at Electric Utility Plants, August 1990**

Census Division and State	August 1990		August 1989		Year to Date					
	Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu	1990		1989		Percent Change	
					Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu	Lbs. sulfur per MM Btu	Cents per MM Btu
<b>New England</b> .....	1.10	177	1.23	173	0.85	181	1.19	187	-20.5	8.3
Connecticut .....	-	-	-	-	.43	188	.39	178	8.8	11.5
Massachusetts .....	.93	178	.94	188	.92	180	.93	184	-1.8	9.7
New Hampshire .....	1.89	172	1.39	178	1.27	182	1.54	169	-17.4	7.6
<b>Mid Atlantic</b> .....	1.44	141	1.39	136	1.42	145	1.38	133	3.1	9.1
New Jersey .....	.63	186	.71	181	.85	190	.72	174	18.7	9.3
New York .....	1.48	161	1.42	148	1.43	159	1.41	145	.9	9.4
Pennsylvania .....	1.46	134	1.42	129	1.44	139	1.43	125	.6	11.3
<b>East North Central</b> .....	1.40	124	1.84	124	1.49	126	1.82	119	-8.3	6.5
Illinois .....	1.71	122	1.87	116	1.57	132	1.38	124	14.3	6.0
Indiana .....	1.67	116	1.93	116	1.74	119	1.98	109	-12.6	8.9
Michigan .....	.85	141	.80	145	.70	150	.62	150	13.2	-2
Ohio .....	1.70	121	1.85	122	1.78	123	1.80	113	-1.2	8.9
Wisconsin .....	.74	118	.83	143	.66	117	.74	142	-11.8	-17.3
<b>West North Central</b> .....	1.19	114	1.40	111	1.18	108	1.38	107	-14.8	1.3
Iowa .....	.74	101	1.13	102	.88	93	1.37	104	-50.2	-10.3
Kansas .....	1.72	120	1.99	120	2.11	125	1.48	108	44.7	15.7
Minnesota .....	1.08	144	1.08	120	.82	115	.80	118	2.1	-2.4
Missouri .....	1.42	130	1.97	130	1.51	126	1.72	119	-12.3	5.2
Nebraska .....	.40	89	.36	73	.45	88	.38	69	24.9	-1.0
North Dakota .....	-	-	-	-	-	-	1.00	48	-	-
<b>South Atlantic</b> .....	1.12	143	1.14	149	1.20	144	1.19	140	1.0	2.6
Delaware .....	.80	161	-	-	.73	182	.89	161	-17.8	12.5
Florida .....	1.45	146	1.88	143	1.75	149	1.85	144	-5.4	3.7
Georgia .....	.99	154	1.22	158	1.21	152	1.19	151	2.4	.7
Maryland .....	1.31	167	.94	186	1.12	161	.95	158	17.6	3.2
North Carolina .....	.78	143	.77	184	.78	153	.73	148	4.6	3.3
South Carolina .....	.97	156	.90	158	.93	157	.86	156	8.2	.8
Virginia .....	.64	141	.73	182	.71	153	.71	152	.2	.8
West Virginia .....	1.44	114	1.44	113	1.32	114	1.42	104	-7.3	10.3
<b>East South Central</b> .....	1.48	122	1.97	109	1.54	121	1.82	108	-15.3	12.8
Alabama .....	1.45	133	2.25	119	1.75	126	1.91	120	-8.2	5.2
Kentucky .....	1.40	117	1.95	102	1.43	116	1.91	101	-25.0	15.1
Mississippi .....	2.48	143	2.11	135	1.97	147	1.90	135	3.5	8.7
Tennessee .....	1.57	119	1.51	112	1.46	122	1.40	113	3.9	7.6
<b>West South Central</b> .....	.50	125	.78	118	.58	128	.86	181	-34.7	-30.5
Louisiana .....	-	-	-	-	-	-	.87	131	-	-
Oklahoma .....	.56	122	.88	120	.68	121	.63	124	7.9	-2.4
Texas .....	.43	128	.40	110	.47	130	.90	193	-47.9	-32.6
<b>Mountain</b> .....	.48	80	.41	89	.48	88	.41	87	13.1	1.1
Arizona .....	.64	145	-	-	.64	145	-	-	-	-
Colorado .....	.38	93	.39	95	.38	99	.38	98	1.7	1.6
Nevada .....	.62	149	-	-	.62	149	-	-	-	-
Utah .....	.45	104	.46	108	.47	104	.48	103	-1.6	.7
Wyoming .....	.56	74	.38	59	.50	68	.39	63	29.4	7.6
<b>Pacific</b> .....	-	-	.38	124	.36	128	.48	117	-25.0	8.6
Washington .....	-	-	.38	124	.36	128	.48	117	-25.0	8.6
<b>U.S. Total</b> .....	1.23	129	1.41	130	1.30	130	1.38	128	-5.6	1.6

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.  
Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 15. Coal Receipts and Prices by Sulfur Content at Electric Utility Plants, by State of Origin and Imports, August 1990**

State	0-0.60 lbs sulfur per MM Btu		0.61-1.67 lbs sulfur per MM Btu		> 1.67 lbs. sulfur per MM Btu		Total			Percent Change vs prior year		
	Quantity (thousand short tons)	Cents per MM Btu	Quantity (thousand short tons)	Cents per MM Btu	Quantity (thousand short tons)	Cents per MM Btu	Quantity (thousand short tons)	Cents per MM Btu	Lbs. sulfur per MM Btu	Quantity	Price	Sulfur Content
Alabama .....	366	260	641	183	348	182	1,356	204	1.07	1.2	4.8	-10.5
Arizona .....	955	110	-	-	-	-	955	110	.43	-24.4	8.8	-3.2
Colorado .....	1,455	142	-	-	-	-	1,455	142	.39	11.5	-5.0	-8
Illinois .....	-	-	777	167	4,066	156	4,842	158	2.46	-3.5	.2	4.3
Indiana .....	44	152	214	128	2,369	126	2,627	127	2.31	5.0	.8	-2.6
Iowa .....	-	-	-	-	7	161	7	161	2.77	40.0	7.1	-29.2
Kansas .....	-	-	-	-	49	130	49	130	2.54	-55.4	-4.0	-35.4
Kentucky .....	1,394	167	6,187	168	3,658	127	11,239	155	1.47	1.2	-.2	-.3
Louisiana .....	-	-	309	132	-	-	309	132	.73	-.6	2.1	-1.7
Maryland .....	-	-	275	143	7	182	282	144	1.40	43.3	-4.0	-3.1
Missouri .....	-	-	-	-	234	144	234	144	3.96	-17.1	7.1	-8.0
Montana .....	1,755	158	1,626	106	-	-	3,381	134	.55	-11.3	-1.5	-7.4
New Mexico .....	425	193	1,599	137	-	-	2,024	149	.74	-6.2	5.2	.5
North Dakota .....	-	-	1,915	71	202	72	2,117	71	1.30	4.7	-3.0	12.6
Ohio .....	1	168	56	130	2,451	149	2,508	149	2.87	-12.4	-7.9	1.6
Oklahoma .....	29	155	35	148	8	107	72	146	1.07	-35.3	3.2	-27.9
Pennsylvania .....	128	167	2,917	155	1,362	153	4,407	154	1.49	-.1	4.2	4.8
Tennessee .....	-	-	295	134	60	122	355	132	1.20	-14.1	-10.1	7.8
Texas .....	-	-	2,393	103	2,183	105	4,577	104	1.61	.8	7.5	-2.2
Utah .....	1,314	106	149	153	-	-	1,463	111	.43	-.5	-6.3	2.8
Virginia .....	275	171	1,334	165	-	-	1,609	166	.91	7.0	-1.7	.1
Washington .....	-	-	401	153	-	-	401	153	.98	.0	-3.3	.0
West Virginia .....	1,906	169	3,749	162	2,511	142	8,166	157	1.36	10.1	1.5	4.1
Wyoming .....	15,335	135	712	89	-	-	16,047	133	.45	4.0	-2.7	.2
Imported .....	90	146	-	-	-	-	90	146	.51	-44.4	-24.3	-1.2
U.S. Total .....	25,472	144	25,584	149	19,515	140	70,571	145	1.29	.6	-.1	.1

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 16. Coal Receipts and Prices by Sulfur Content at Electric Utility Plants, by State of Origin and Imports, January-August 1990**

State	0-0.60 lbs sulfur per MM Btu		0.61-1.67 lbs sulfur per MM Btu		> 1.67 lbs. sulfur per MM Btu		Total			Percent Change vs prior year		
	Quantity (thousand short tons)	Cents per MM Btu	Quantity (thousand short tons)	Cents per MM Btu	Quantity (thousand short tons)	Cents per MM Btu	Quantity (thousand short tons)	Cents per MM Btu	Lbs. sulfur per MM Btu	Quantity	Price	Sulfur Content
Alabama .....	2,904	259	5,194	187	2,871	184	10,970	208	1.09	14.1	2.0	-0.8
Arizona .....	7,173	109	-	-	-	-	7,173	109	.45	-11.3	4.6	.7
Colorado .....	10,185	142	150	218	-	-	10,335	143	.39	14.7	3.7	4.0
Illinois .....	-	-	6,748	165	29,491	154	36,240	158	2.42	.7	-4	3.2
Indiana .....	423	152	2,143	126	18,533	128	21,099	128	2.28	20.6	1.3	-9
Iowa .....	-	-	-	-	43	163	43	163	3.45	65.4	8.4	-8.3
Kansas .....	-	-	-	-	477	121	477	121	2.57	5.1	-5.0	-26.4
Kentucky .....	11,847	169	46,586	169	28,856	125	87,090	155	1.49	9.9	.5	2.1
Louisiana .....	-	-	2,109	134	-	-	2,109	134	.79	11.1	5.1	-4.2
Maryland .....	-	-	1,794	155	51	120	1,845	154	1.27	23.2	5.8	-3.4
Missouri .....	-	-	-	-	1,637	167	1,637	167	3.96	-18.8	26.0	-8.2
Montana .....	9,080	185	13,131	108	-	-	22,211	141	.58	-3.3	4.3	-7.1
New Mexico .....	4,124	185	11,210	135	-	-	15,334	149	.74	4.7	3.4	1.4
North Dakota .....	-	-	14,352	73	1,181	64	15,533	72	1.25	-1.1	-2.2	10.4
Ohio .....	25	152	1,193	143	18,978	150	20,196	150	2.84	-6	-3.0	1.7
Oklahoma .....	417	148	350	144	160	112	927	139	1.26	33.5	-7	-31.7
Pennsylvania .....	1,353	173	23,359	154	9,641	152	34,353	154	1.48	11.0	4.8	3.5
Tennessee .....	118	123	2,533	152	623	134	3,275	147	1.15	7.8	5.6	9.2
Texas .....	-	-	21,558	104	11,259	110	32,817	108	1.58	1.1	2.9	1.3
Utah .....	9,694	114	716	153	-	-	10,410	117	.44	8.2	-8.8	1.0
Virginia .....	2,241	185	9,201	165	9	155	11,452	169	.88	-6.5	2.5	-6
Washington .....	-	-	3,216	183	-	-	3,216	183	.93	-2.8	2.8	5.4
West Virginia .....	15,389	169	26,462	180	16,702	142	58,553	157	1.32	7.0	3.8	1.8
Wyoming .....	109,023	136	6,659	99	9	136	115,691	134	.44	5.9	-3.4	-6
Imported .....	311	170	587	177	-	-	898	175	.60	16.4	-2.2	8.5
U.S. Total .....	184,107	147	199,253	149	140,523	140	523,883	146	1.29	5.6	1.0	1.4

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.  
Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 17. Destination of Coal Received at Electric Utility Plants by Origin,  
January-August 1990**

State of Destination State of Origin and Imports	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
Alabama .....	14,830	14,009	77.2	83.3	1.24	1.35	186	187
Alabama .....	10,791	9,500	94.9	94.7	1.08	1.09	208	202
Illinois .....	416	632	-	4.0	2.03	1.99	112	109
Indiana .....	459	188	-	-	2.05	2.84	117	106
Kentucky .....	1,770	1,464	33.9	51.2	1.98	2.22	134	126
Ohio .....	408	1,698	83.9	100.0	2.01	1.99	118	208
Tennessee .....	566	491	13.3	34.2	.67	.61	124	123
West Virginia .....	4	36	-	100.0	.51	.60	151	124
Wyoming .....	216	-	-	-	.44	-	170	-
Arizona .....	10,139	10,055	99.8	100.0	.46	.46	145	138
Arizona .....	4,561	4,888	100.0	100.0	.44	.44	101	98
Colorado .....	679	352	100.0	100.0	.32	.34	175	171
New Mexico .....	4,890	4,816	99.8	100.0	.50	.49	187	181
Arkansas .....	7,048	7,646	100.0	100.0	.39	.39	164	163
Wyoming .....	7,048	7,646	100.0	100.0	.39	.39	164	163
Colorado .....	10,322	10,502	86.8	87.8	.39	.38	107	107
Colorado .....	6,781	6,720	79.5	83.6	.39	.38	108	109
New Mexico .....	-	18	-	-	-	.41	-	131
Wyoming .....	3,541	3,764	100.0	95.7	.39	.37	106	101
Connecticut .....	686	536	92.6	89.0	.41	.39	212	216
Kentucky .....	686	536	92.6	89.0	.41	.39	212	216
Delaware .....	1,519	1,191	75.2	90.2	.73	.78	182	180
Kentucky .....	117	24	14.2	75.0	.52	.61	194	177
Maryland .....	21	7	100.0	100.0	1.11	1.16	141	139
Pennsylvania .....	229	305	39.8	81.3	1.05	1.16	164	170
Virginia .....	197	21	51.9	100.0	.69	.69	197	201
West Virginia .....	855	834	95.3	93.6	.68	.65	183	183
Florida .....	16,438	15,530	81.2	77.1	1.42	1.42	185	179
Alabama .....	-	13	-	-	-	2.55	-	114
Illinois .....	2,853	2,693	99.0	100.0	2.42	2.37	208	198
Indiana .....	317	354	-	21.7	2.85	2.97	108	126
Kentucky .....	10,571	10,006	77.2	69.5	1.30	1.29	179	172
Tennessee .....	75	42	100.0	100.0	.85	.80	217	213
Virginia .....	598	535	95.0	100.0	.58	.58	243	232
West Virginia .....	1,376	1,391	90.0	87.0	.94	.96	184	182
Imported coal Colombia .....	479	459	100.0	100.0	.65	.61	177	173
Imported coal Venezuela .....	170	37	-	-	.53	.36	153	141
Georgia .....	18,517	16,978	73.5	75.4	1.39	1.38	173	174
Alabama .....	179	102	13.0	-	1.63	1.62	155	151
Illinois .....	3,363	3,464	94.3	100.0	2.52	2.20	170	187
Kentucky .....	8,782	9,543	71.9	66.9	1.28	1.26	168	164
Montana .....	-	54	-	-	-	.34	-	181
Ohio .....	18	-	-	-	-	-	-	-
Tennessee .....	1,054	632	58.8	87.1	1.08	.75	186	204
Virginia .....	2,186	2,269	79.0	67.8	1.07	1.11	175	188
West Virginia .....	966	867	100.0	100.0	.57	.53	246	241
Wyoming .....	971	24	6.0	-	.39	.40	134	166
Imported coal Colombia .....	-	23	-	-	-	.54	-	173
Illinois .....	17,710	16,287	85.0	91.9	1.93	1.86	175	182
Illinois .....	10,503	9,532	90.2	85.6	2.71	2.67	147	151
Indiana .....	1,402	1,274	73.0	68.5	1.60	1.34	124	127
Kentucky .....	1,486	1,062	41.2	65.4	.83	.60	156	163
Montana .....	1,842	1,817	100.0	99.3	.39	.38	291	283
New Mexico .....	111	-	-	-	.43	-	170	-
Virginia .....	-	3	-	-	-	.59	-	184
West Virginia .....	172	187	13.4	58.7	.51	.52	157	167
Wyoming .....	2,194	2,412	95.1	98.7	.42	.49	293	290
Indiana .....	32,973	25,302	84.1	81.8	1.91	2.16	138	137
Colorado .....	417	37	100.0	-	.39	.35	300	308
Illinois .....	6,318	5,875	88.6	87.4	2.40	2.43	160	160
Indiana .....	14,128	12,101	82.3	84.1	2.39	2.48	128	123
Kentucky .....	3,239	2,745	89.8	80.8	2.35	2.45	135	125
Montana .....	432	198	65.3	83.7	.39	.36	242	269
Ohio .....	44	7	-	-	2.21	1.83	125	130
West Virginia .....	264	216	67.8	42.3	.55	.81	206	179
Wyoming .....	8,130	4,122	82.6	70.7	.39	.45	128	148
Iowa .....	10,193	9,573	70.7	84.1	.79	.86	113	124
Illinois .....	798	1,138	89.1	69.2	2.48	2.52	165	149
Indiana .....	656	431	63.7	47.9	2.24	2.16	135	129

See footnotes at end of table.

**Table 17. Destination of Coal Received at Electric Utility Plants by Origin,  
January-August 1990 (Continued)**

State of Destination State of Origin and Imports	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
Iowa								
Iowa .....	43	26	100.0	100.0	3.45	3.78	163	150
Kentucky .....	9	53	-	-	2.73	2.34	124	136
Wyoming .....	8,689	7,925	69.5	88.7	.43	.43	105	119
Kansas .....	10,636	10,227	88.3	86.2	.69	.70	125	123
Colorado .....	178	-	94.2	-	.33	-	118	-
Illinois .....	933	478	17.9	22.3	2.52	2.65	147	140
Kansas .....	209	402	-	49.2	2.44	3.59	121	127
Wyoming .....	9,316	9,347	97.2	91.1	.41	.42	123	121
Kentucky .....	24,279	20,280	70.7	60.2	2.26	2.34	119	113
Illinois .....	91	9	88.6	-	1.59	1.72	135	116
Indiana .....	1,820	1,440	61.8	42.2	2.39	2.14	110	104
Kentucky .....	19,550	16,736	74.7	64.6	2.45	2.54	119	114
Ohio .....	197	108	55.2	58.0	2.39	2.18	147	133
Pennsylvania .....	11	18	-	49.4	2.03	1.98	107	127
Tennessee .....	395	336	82.6	6.5	2.08	2.05	121	103
Virginia .....	60	-	100.0	-	.58	-	158	-
West Virginia .....	2,037	1,634	39.8	42.6	.62	.67	129	116
Wyoming .....	113	-	34.5	-	.35	-	124	-
Louisiana .....	7,120	7,964	100.0	96.9	.61	.60	169	162
Louisiana .....	2,109	1,899	100.0	86.9	.79	.82	134	128
West Virginia .....	159	117	100.0	100.0	.52	.50	205	202
Wyoming .....	4,852	5,948	100.0	100.0	.55	.55	180	170
Maryland .....	8,768	5,987	68.8	67.5	1.12	1.08	165	160
Kentucky .....	325	551	74.8	83.1	.56	.59	161	166
Maryland .....	1,101	905	46.6	57.4	1.24	1.25	171	166
Pennsylvania .....	1,670	1,638	92.2	95.0	1.48	1.49	180	169
West Virginia .....	3,672	2,646	64.3	56.9	.98	.94	156	148
Imported coal Colombia .....	-	247	-	-	-	.47	-	195
Massachusetts .....	2,859	2,928	65.6	78.1	.98	.94	173	159
Kentucky .....	49	23	-	-	.75	.69	180	138
Maryland .....	40	-	-	-	.75	-	185	-
Pennsylvania .....	735	533	31.2	10.1	1.08	1.03	174	164
Virginia .....	928	1,284	92.0	100.0	.95	.91	174	161
West Virginia .....	974	1,088	81.6	87.3	.96	.93	169	154
Imported coal Colombia .....	64	-	-	-	.81	-	179	-
Imported coal Venezuela .....	70	-	-	-	.48	-	181	-
Michigan .....	18,229	17,587	80.2	88.0	.63	.59	164	177
Indiana .....	112	112	78.5	77.9	2.44	2.30	162	159
Kentucky .....	4,714	4,655	72.6	88.8	.72	.64	179	197
Montana .....	6,713	6,838	97.0	100.0	.37	.38	154	159
Ohio .....	97	84	100.0	100.0	2.94	2.60	208	206
Pennsylvania .....	1,257	1,064	71.7	81.5	1.09	1.01	159	174
Virginia .....	113	398	100.0	100.0	1.09	.92	186	175
West Virginia .....	3,853	3,931	77.4	78.0	.67	.58	171	182
Wyoming .....	1,371	505	36.9	-	.33	.34	110	119
Minnesota .....	10,900	10,233	93.8	95.2	.57	.62	132	127
Illinois .....	34	40	100.0	100.0	1.35	1.38	182	195
Indiana .....	45	53	10.1	-	1.79	1.59	158	138
Kentucky .....	8	1	56.8	-	.91	.59	189	198
Montana .....	6,131	6,084	90.1	93.1	.76	.80	136	130
North Dakota .....	1	-	100.0	-	.87	-	174	-
Pennsylvania .....	3	-	100.0	-	1.02	-	176	-
West Virginia .....	2	-	100.0	-	.85	-	169	-
Wyoming .....	4,676	4,054	99.1	99.6	.30	.31	125	120
Mississippi .....	2,672	2,287	72.8	83.0	1.34	1.22	164	170
Illinois .....	760	704	80.1	89.6	2.02	2.00	150	147
Indiana .....	23	-	-	-	4.17	-	126	-
Kentucky .....	1,889	1,558	68.8	81.3	1.04	.87	170	181
West Virginia .....	-	24	-	-	-	1.20	-	144
Missouri .....	16,229	16,439	80.2	87.1	1.97	2.03	137	134
Colorado .....	168	9	100.0	100.0	.40	.31	159	139
Illinois .....	8,323	9,445	85.2	89.8	2.22	2.17	151	150
Indiana .....	115	55	100.0	49.1	2.90	1.09	122	123
Kansas .....	268	53	3.6	43.9	2.66	2.79	121	132
Kentucky .....	877	41	98.1	100.0	2.52	2.53	123	131
Missouri .....	1,637	2,015	97.3	99.0	3.96	4.22	167	132
New Mexico .....	18	-	-	-	.34	-	135	-
Ohio .....	24	-	-	-	2.10	-	171	-

See footnotes at end of table.

**Table 17. Destination of Coal Received at Electric Utility Plants by Origin,  
January-August 1990 (Continued)**

State of Destination State of Origin and Imports	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
<b>Missouri</b>								
Oklahoma .....	36	231	100.0	66.9	3.64	3.30	138	135
Wyoming .....	4,761	4,590	65.9	78.2	.42	.44	97	95
<b>Montana</b> .....	5,894	6,508	100.0	100.0	.73	.81	65	55
Montana .....	5,894	6,508	100.0	100.0	.73	.81	65	55
<b>Nebraska</b> .....	5,719	4,952	76.9	88.7	.42	.42	77	87
Colorado .....	-	65	-	100.0	-	.47	-	182
Montana .....	-	0	-	-	-	.36	-	23
Wyoming .....	5,719	4,887	76.9	88.5	.42	.42	77	85
<b>Nevada</b> .....	4,929	4,945	99.8	100.0	.47	.47	152	142
Arizona .....	2,612	3,196	100.0	100.0	.48	.47	123	113
Utah .....	1,884	1,540	99.6	100.0	.47	.45	181	192
Wyoming .....	433	199	100.0	100.0	.44	.55	202	196
<b>New Hampshire</b> .....	804	616	77.3	-	1.40	1.54	178	169
Kentucky .....	17	-	-	-	.68	-	201	-
Pennsylvania .....	100	119	100.0	-	1.04	.99	179	174
West Virginia .....	572	496	77.0	-	1.65	1.67	176	168
Imported coal Canada .....	34	-	-	-	.97	-	181	-
Imported coal Venezuela .....	81	-	100.0	-	.39	-	189	-
<b>New Jersey</b> .....	2,006	2,232	88.3	72.8	.84	.86	179	174
Kentucky .....	31	48	-	-	.62	.58	190	177
Ohio .....	14	-	-	-	1.66	-	203	-
Pennsylvania .....	26	25	-	-	.95	1.27	189	183
Virginia .....	760	837	99.2	74.5	.58	.61	177	172
West Virginia .....	1,175	1,316	86.6	76.1	1.01	1.03	180	176
Imported coal Venezuela .....	-	6	-	-	-	.37	-	188
<b>New Mexico</b> .....	10,272	9,816	100.0	100.0	.87	.86	130	125
New Mexico .....	10,272	9,816	100.0	100.0	.87	.86	130	125
<b>New York</b> .....	6,973	6,516	67.1	64.8	1.45	1.33	161	157
Kentucky .....	365	410	97.4	100.0	.38	.39	209	200
Maryland .....	19	-	-	-	1.29	-	168	-
Ohio .....	38	7	-	-	1.55	1.53	160	160
Pennsylvania .....	3,629	3,825	47.7	44.9	1.45	1.35	155	148
West Virginia .....	2,922	2,274	88.6	92.3	1.57	1.48	161	163
<b>North Carolina</b> .....	13,032	11,894	85.1	85.9	.76	.73	179	176
Kentucky .....	6,492	5,930	82.1	82.5	.78	.74	184	179
Tennessee .....	-	145	-	100.0	-	1.07	-	191
Virginia .....	2,924	2,887	96.9	92.8	.84	.80	168	170
West Virginia .....	3,615	2,933	80.9	85.4	.64	.62	178	174
<b>North Dakota</b> .....	14,192	14,353	100.0	97.8	1.23	1.10	69	69
North Dakota .....	14,192	14,353	100.0	97.8	1.23	1.10	69	69
<b>Ohio</b> .....	34,494	32,855	66.9	67.7	2.04	2.08	152	147
Illinois .....	24	-	-	-	2.57	-	117	-
Indiana .....	46	35	-	-	2.93	2.32	109	92
Kentucky .....	6,787	6,019	46.9	55.2	1.00	1.07	156	152
Ohio .....	16,828	16,414	71.2	72.6	2.80	2.82	154	151
Pennsylvania .....	2,191	2,081	59.4	54.5	1.72	1.73	139	134
Virginia .....	-	21	-	-	-	1.06	-	183
West Virginia .....	8,618	8,285	76.6	70.9	1.60	1.48	148	139
<b>Oklahoma</b> .....	9,718	9,764	88.6	92.0	.53	.49	139	136
Oklahoma .....	891	463	47.6	23.8	1.16	1.13	139	143
Wyoming .....	8,826	9,301	92.7	95.4	.45	.45	139	136
<b>Oregon</b> .....	223	-	100.0	-	.37	-	110	-
Wyoming .....	223	-	100.0	-	.37	-	110	-
<b>Pennsylvania</b> .....	30,679	27,897	76.7	75.3	1.75	1.69	151	144
Ohio .....	1,418	1,383	97.6	95.2	3.35	3.31	151	148
Pennsylvania .....	23,021	20,241	70.3	69.5	1.49	1.43	153	145
West Virginia .....	6,240	6,273	95.6	89.8	2.35	2.17	146	140
<b>South Carolina</b> .....	6,239	6,445	73.5	65.9	.94	.89	172	172
Kentucky .....	5,356	5,709	73.6	64.1	.93	.87	173	174
Tennessee .....	188	51	-	.2	1.17	1.16	164	151
Virginia .....	682	673	93.0	86.5	.94	.97	161	157
West Virginia .....	14	11	63.5	36.5	.78	1.15	180	178
<b>South Dakota</b> .....	1,340	1,353	100.0	100.0	1.52	1.47	116	124
North Dakota .....	1,340	1,353	100.0	100.0	1.52	1.47	116	124
<b>Tennessee</b> .....	14,092	12,981	79.3	81.7	1.66	1.65	136	135
Illinois .....	970	989	30.8	8.4	1.91	1.67	118	112
Indiana .....	704	-	-	-	1.75	-	123	-
Kentucky .....	10,623	9,129	87.5	91.9	1.71	1.75	141	141

See footnotes at end of table.



**Table 17. Destination of Coal Received at Electric Utility Plants by Origin,  
January-August 1990 (Continued)**

State of Destination State of Origin and Imports	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
<b>Tennessee</b>								
Tennessee .....	997	1,347	77.7	66.8	1.14	1.11	121	115
Virginia .....	788	897	100.0	81.4	1.39	1.44	131	123
West Virginia .....	-	18	-	100.0	-	2.09	-	139
<b>Texas</b>	56,217	56,925	97.2	89.0	1.01	.97	145	145
Colorado .....	1,207	955	68.6	100.0	.35	.35	206	221
Texas .....	32,817	32,461	99.8	91.8	1.56	1.54	106	103
Utah .....	-	218	-	59.9	-	.45	-	171
Wyoming .....	22,193	23,290	94.9	84.9	.44	.43	184	184
<b>Utah</b>	9,430	8,725	88.0	92.4	.44	.43	113	125
Colorado .....	904	870	100.0	100.0	.49	.40	221	239
Utah .....	8,526	7,855	88.7	91.6	.43	.43	102	113
<b>Virginia</b>	5,024	6,554	68.7	51.4	.75	.72	156	152
Kentucky .....	1,666	2,154	62.4	44.3	.82	.79	159	153
Virginia .....	2,207	2,383	71.2	71.5	.70	.70	153	156
West Virginia .....	1,152	2,018	73.0	35.2	.75	.67	156	147
Washington .....	3,564	3,745	90.0	85.7	.87	.82	159	155
Washington .....	3,216	3,308	99.8	97.0	.93	.88	163	159
Wyoming .....	348	437	-	-	.35	.41	127	124
<b>West Virginia</b>	22,374	20,048	74.4	74.6	1.51	1.50	147	140
Kentucky .....	560	539	83.1	57.3	.83	.77	176	170
Maryland .....	664	585	57.1	42.5	1.37	1.44	123	113
Ohio .....	1,112	611	53.1	35.2	3.26	3.32	96	104
Pennsylvania .....	358	196	9.4	16.0	1.61	1.23	115	120
West Virginia .....	19,679	18,118	77.1	78.2	1.44	1.47	150	142
<b>Wisconsin</b>	11,834	11,733	74.1	87.8	.85	.89	136	145
Illinois .....	855	1,005	72.4	89.0	1.79	1.79	142	143
Indiana .....	1,271	1,449	98.7	95.7	1.75	1.70	189	180
Kentucky .....	114	297	-	39.6	.80	1.22	184	156
Montana .....	1,199	1,479	78.2	86.7	.69	.74	158	157
New Mexico .....	43	-	-	-	.39	-	174	-
Pennsylvania .....	1,123	899	100.0	100.0	1.29	1.28	156	151
Virginia .....	-	37	-	-	-	.56	-	163
West Virginia .....	133	17	-	-	1.24	1.62	184	175
Wyoming .....	7,096	6,549	68.1	87.4	.41	.40	112	129
<b>Wyoming</b>	14,974	14,215	83.2	90.6	.61	.59	84	85
Wyoming .....	14,974	14,215	83.2	90.6	.61	.59	84	85
<b>U.S. Total</b>	<b>523,883</b>	<b>496,015</b>	<b>82.8</b>	<b>83.1</b>	<b>1.29</b>	<b>1.27</b>	<b>146</b>	<b>144</b>

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.  
Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 17. Destination of Coal Received at Electric Utility Plants by Origin,  
January-August 1990 (Continued)**

State of Destination State of Origin and Imports	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
Missouri								
Oklahoma	36	231	100.0	66.9	3.64	3.30	138	135
Wyoming	4,761	4,590	65.9	78.2	.42	.44	97	95
Montana	5,894	6,508	100.0	100.0	.73	.81	65	55
Montana	5,894	6,508	100.0	100.0	.73	.81	65	55
Nebraska	5,719	4,952	76.9	88.7	.42	.42	77	87
Colorado	-	65	-	100.0	-	.47	-	182
Montana	-	0	-	-	-	.36	-	23
Wyoming	5,719	4,887	76.9	88.5	.42	.42	77	85
Nevada	4,929	4,945	99.8	100.0	.47	.47	152	142
Arizona	2,612	3,196	100.0	100.0	.48	.47	123	113
Utah	1,884	1,549	99.6	100.0	.47	.45	181	192
Wyoming	433	199	100.0	100.0	.44	.55	202	196
New Hampshire	804	616	77.3	-	1.40	1.54	178	169
Kentucky	17	-	-	-	.68	-	201	-
Pennsylvania	100	119	100.0	-	1.04	.99	179	174
West Virginia	572	496	77.0	-	1.65	1.67	176	168
Imported coal Canada	34	-	-	-	.97	-	181	-
Imported coal Venezuela	81	-	100.0	-	.39	-	189	-
New Jersey	2,006	2,232	88.3	72.8	.84	.86	179	174
Kentucky	31	48	-	-	.62	.58	190	177
Ohio	14	-	-	-	1.66	-	203	-
Pennsylvania	26	25	-	-	.95	1.27	189	183
Virginia	760	837	99.2	74.5	.58	.61	177	172
West Virginia	1,175	1,316	86.6	76.1	1.01	1.03	180	176
Imported coal Venezuela	-	6	-	-	-	.37	-	188
New Mexico	10,272	9,816	100.0	100.0	.87	.86	130	125
New Mexico	10,272	9,816	100.0	100.0	.87	.86	130	125
New York	6,973	6,516	67.1	64.8	1.45	1.33	161	157
Kentucky	365	410	97.4	100.0	.38	.39	209	200
Maryland	19	-	-	-	1.29	-	168	-
Ohio	38	7	-	-	1.55	1.53	160	160
Pennsylvania	3,629	3,825	47.7	44.9	1.45	1.35	155	148
West Virginia	2,922	2,274	88.6	92.3	1.57	1.48	161	163
North Carolina	13,032	11,894	85.1	85.9	.76	.73	179	176
Kentucky	6,492	5,930	82.1	82.5	.78	.74	184	179
Tennessee	-	145	-	100.0	-	1.07	-	191
Virginia	2,924	2,887	96.9	92.8	.84	.80	168	170
West Virginia	3,615	2,933	80.9	85.4	.64	.62	178	174
North Dakota	14,192	14,353	100.0	97.8	1.23	1.10	69	69
North Dakota	14,192	14,353	100.0	97.8	1.23	1.10	69	69
Ohio	34,494	32,855	66.9	67.7	2.04	2.08	152	147
Illinois	24	-	-	-	2.57	-	117	-
Indiana	46	35	-	-	2.93	2.32	109	92
Kentucky	6,787	6,019	46.9	55.2	1.00	1.07	156	152
Ohio	16,828	16,414	71.2	72.6	2.80	2.82	154	151
Pennsylvania	2,191	2,081	59.4	54.5	1.72	1.73	139	134
Virginia	-	21	-	-	-	1.06	-	183
West Virginia	8,618	8,285	76.6	70.9	1.50	1.48	148	139
Oklahoma	9,718	9,764	88.6	92.0	.53	.49	139	136
Oklahoma	891	463	47.6	23.8	1.16	1.13	139	143
Wyoming	8,826	9,301	92.7	95.4	.45	.45	139	136
Oregon	223	-	100.0	-	.37	-	110	-
Wyoming	223	-	100.0	-	.37	-	110	-
Pennsylvania	30,679	27,897	76.7	75.3	1.75	1.69	151	144
Ohio	1,418	1,383	97.6	95.2	3.35	3.31	151	148
Pennsylvania	23,021	20,241	70.3	69.5	1.49	1.43	153	145
West Virginia	6,240	6,273	95.6	89.8	2.35	2.17	146	140
South Carolina	6,239	6,445	73.5	65.9	.94	.89	172	172
Kentucky	5,356	5,709	73.6	64.1	.93	.87	173	174
Tennessee	188	51	-	.2	1.17	1.16	164	151
Virginia	682	673	93.0	86.5	.94	.97	161	157
West Virginia	14	11	63.5	36.5	.78	1.15	180	178
South Dakota	1,340	1,353	100.0	100.0	1.52	1.47	116	124
North Dakota	1,340	1,353	100.0	100.0	1.52	1.47	116	124
Tennessee	14,092	12,381	79.3	81.7	1.66	1.65	138	135
Illinois	970	989	30.8	8.4	1.91	1.67	118	112
Indiana	704	-	-	-	1.75	-	123	-
Kentucky	10,623	9,129	87.5	91.9	1.71	1.75	141	141

See footnotes at end of table.

**Table 17. Destination of Coal Received at Electric Utility Plants by Origin,  
January-August 1990 (Continued)**

State of Destination State of Origin and Imports	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
Tennessee								
Tennessee .....	997	1,347	77.7	66.8	1.14	1.11	121	115
Virginia .....	798	897	100.0	81.4	1.39	1.44	131	123
West Virginia .....	-	18	-	100.0	-	2.09	-	139
Texas	56,217	56,925	97.2	89.0	1.01	.97	145	145
Colorado .....	1,207	955	68.6	100.0	.35	.35	206	221
Texas .....	32,817	32,461	99.8	91.8	1.56	1.54	106	103
Utah .....	-	218	-	59.9	-	.45	-	171
Wyoming .....	22,193	23,290	94.9	84.9	.44	.43	184	184
Utah	9,430	8,725	88.0	92.4	.44	.43	113	125
Colorado .....	904	870	100.0	100.0	.49	.40	221	239
Utah .....	8,526	7,855	86.7	91.6	.43	.43	102	113
Virginia	5,024	6,554	68.7	51.4	.75	.72	158	152
Kentucky .....	1,666	2,154	62.4	44.3	.82	.79	159	153
Virginia .....	2,207	2,383	71.2	71.5	.70	.70	153	156
West Virginia .....	1,152	2,018	73.0	35.2	.75	.67	156	147
Washington	3,564	3,745	90.0	85.7	.87	.82	159	155
Washington .....	3,216	3,308	99.8	97.0	.93	.88	183	159
Wyoming .....	348	437	-	-	.35	.41	127	124
West Virginia	22,374	20,048	74.4	74.6	1.51	1.50	147	140
Kentucky .....	560	539	83.1	57.3	.83	.77	176	170
Maryland .....	664	585	57.1	42.5	1.37	1.44	123	113
Ohio .....	1,112	611	53.1	35.2	3.26	3.32	96	104
Pennsylvania .....	358	188	9.4	16.0	1.61	1.23	115	120
West Virginia .....	19,679	18,118	77.1	78.2	1.44	1.47	150	142
Wisconsin	11,834	11,733	74.1	87.8	.85	.89	136	145
Illinois .....	855	1,005	72.4	89.0	1.79	1.79	142	143
Indiana .....	1,271	1,449	98.7	95.7	1.75	1.70	189	180
Kentucky .....	114	297	-	39.8	.60	1.22	184	156
Montana .....	1,199	1,479	78.2	86.7	.69	.74	158	157
New Mexico .....	43	-	-	-	.39	-	174	-
Pennsylvania .....	1,123	899	100.0	100.0	1.29	1.28	156	151
Virginia .....	-	37	-	-	-	.56	-	163
West Virginia .....	133	17	-	-	1.24	1.62	164	175
Wyoming .....	7,096	6,549	68.1	87.4	.41	.40	112	129
Wyoming	14,974	14,215	83.2	90.6	.61	.59	84	85
Wyoming .....	14,974	14,215	83.2	90.6	.61	.59	84	85
U.S. Total	523,883	496,015	82.8	83.1	1.20	1.27	146	144

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.  
Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 18. Origin of Coal Received at Electric Utility Plants by Destination,  
January-August 1990**

State of Origin and Imports State of Destination	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
Alabama .....	10,970	9,615	93.5	93.6	1.09	1.10	208	202
Alabama .....	10,791	9,500	94.9	94.7	1.08	1.09	206	202
Florida .....	-	13	-	-	-	2.55	-	114
Georgia .....	179	102	13.0	-	1.63	1.62	155	151
Arizona .....	7,173	8,084	100.0	100.0	.45	.45	109	104
Arizona .....	4,561	4,888	100.0	100.0	.44	.44	101	98
Nevada .....	2,612	3,196	100.0	100.0	.48	.47	123	113
Colorado .....	10,335	9,008	82.8	87.4	.39	.37	143	138
Arizona .....	679	352	100.0	100.0	.32	.34	175	171
Colorado .....	6,781	6,720	79.5	83.6	.39	.38	108	109
Indiana .....	417	37	100.0	-	.39	.35	300	306
Kansas .....	178	-	94.2	-	.33	-	118	-
Missouri .....	168	9	100.0	100.0	.40	.31	159	139
Nebraska .....	-	65	-	100.0	-	.47	-	182
Texas .....	1,207	955	68.6	100.0	.35	.35	206	221
Utah .....	904	870	100.0	100.0	.49	.40	221	239
Illinois .....	36,240	36,005	84.9	87.4	2.42	2.34	156	157
Alabama .....	416	632	-	4.0	2.03	1.99	112	109
Florida .....	2,853	2,693	99.0	100.0	2.42	2.37	208	198
Georgia .....	3,363	3,464	94.3	100.0	2.52	2.20	170	187
Illinois .....	10,503	9,532	90.2	95.6	2.71	2.67	147	151
Indiana .....	6,318	5,875	88.6	87.4	2.40	2.43	160	160
Iowa .....	796	1,138	89.1	69.2	2.48	2.52	165	149
Kansas .....	933	478	17.9	22.3	2.52	2.65	147	140
Kentucky .....	91	9	88.6	-	1.59	1.72	135	116
Minnesota .....	34	40	100.0	100.0	1.35	1.38	182	195
Mississippi .....	760	704	90.1	88.6	2.02	2.00	150	147
Missouri .....	8,323	9,445	85.2	89.8	2.22	2.17	151	150
Ohio .....	24	-	-	-	2.57	-	117	-
Tennessee .....	970	989	30.8	8.4	1.81	1.67	118	112
Wisconsin .....	855	1,005	72.4	89.0	1.79	1.79	142	143
Indiana .....	21,099	17,493	74.2	76.8	2.28	2.30	128	127
Alabama .....	459	188	-	-	2.05	2.84	117	106
Florida .....	317	354	-	21.7	2.85	2.97	108	126
Illinois .....	1,402	1,274	73.0	68.5	1.60	1.34	124	127
Indiana .....	14,128	12,101	82.3	84.1	2.39	2.48	126	123
Iowa .....	656	431	83.7	47.9	2.24	2.16	135	129
Kentucky .....	1,820	1,440	61.8	42.2	2.39	2.14	110	104
Michigan .....	112	112	78.5	77.9	2.44	2.30	162	159
Minnesota .....	45	53	10.1	-	1.79	1.59	158	138
Mississippi .....	23	-	-	-	4.17	-	126	-
Missouri .....	115	55	100.0	49.1	2.90	1.09	122	123
Ohio .....	46	35	-	-	2.93	2.32	109	92
Tennessee .....	704	-	-	-	1.75	-	123	-
Wisconsin .....	1,271	1,449	98.7	95.7	1.75	1.70	180	180
Iowa .....	43	28	100.0	100.0	3.45	3.76	163	150
Iowa .....	43	26	100.0	100.0	3.45	3.76	163	150
Kansas .....	477	454	2.0	48.6	2.57	3.49	121	128
Kansas .....	209	402	-	49.2	2.44	3.59	121	127
Missouri .....	268	53	3.6	43.8	2.66	2.79	121	132
Kentucky .....	87,090	79,232	73.4	71.0	1.49	1.46	155	154
Alabama .....	1,770	1,464	33.9	51.2	1.98	2.22	134	126
Connecticut .....	888	536	92.6	89.0	.41	.39	212	216
Delaware .....	117	24	14.2	75.0	.52	.61	194	177
Florida .....	10,571	10,008	77.2	69.5	1.30	1.29	179	172
Georgia .....	9,782	9,543	71.9	66.9	1.28	1.26	168	164
Illinois .....	1,486	1,062	41.2	65.4	.83	.60	156	163
Indiana .....	3,239	2,745	89.6	80.8	2.35	2.45	135	125
Iowa .....	9	53	-	-	2.73	2.34	124	136
Kentucky .....	19,556	16,736	74.7	64.6	2.45	2.54	119	114
Maryland .....	325	551	74.8	83.1	.56	.59	161	166
Massachusetts .....	49	23	-	-	.75	.69	180	138
Michigan .....	4,714	4,655	72.6	88.8	.72	.64	179	197
Minnesota .....	8	1	56.6	-	.81	.69	189	198
Mississippi .....	1,889	1,558	66.8	81.3	1.04	.87	170	181
Missouri .....	877	41	98.1	100.0	2.52	2.53	123	131
New Hampshire .....	17	-	-	-	.68	-	201	-
New Jersey .....	31	48	-	-	.62	.59	180	177
New York .....	365	410	97.4	100.0	.38	.39	209	200

See footnotes at end of table.

Table 18. Origin of Coal Received at Electric Utility Plants by Destination, January-August 1990 (Continued)

State of Origin and Imports State of Destination	Receipts (thousand short tons)		Contract Receipts (percent)		Supplier Company (100% owned percentage)			
	1990	1989	1990	1989	1990	1989	1990	1989
Kentucky								
North Carolina	6,492	5,930	82.1	82.5	0.73	0.74	0.74	0.73
Ohio	6,787	6,019	46.9	55.2	1.00	1.00	1.00	1.00
South Carolina	5,356	5,709	73.6	64.1	0.01	0.01	0.01	0.01
Tennessee	10,623	9,129	87.5	91.9	1.71	1.71	1.71	1.71
Virginia	1,666	2,154	62.4	44.3	0.02	0.02	0.02	0.02
West Virginia	560	539	83.1	57.3	0.01	0.01	0.01	0.01
Wisconsin	114	297	-	39.6	0.00	0.00	0.00	0.00
Louisiana	2,109	1,899	100.0	86.9	0.79	0.82	0.74	0.78
Louisiana	2,109	1,899	100.0	86.9	0.79	0.82	0.74	0.78
Maryland	1,845	1,497	49.5	51.8	1.27	1.12	1.24	1.08
Delaware	21	7	100.0	100.0	1.11	1.16	1.11	1.19
Maryland	1,101	905	46.6	57.4	1.04	1.11	1.04	1.19
Massachusetts	40	-	-	-	0.75	0.75	0.75	0.75
New York	19	-	-	-	1.29	-	1.29	-
West Virginia	664	585	57.1	42.5	1.57	1.44	1.57	1.44
Missouri	1,637	2,015	97.3	99.0	3.98	4.12	3.98	4.12
Missouri	1,637	2,015	97.3	99.0	3.98	4.12	3.98	4.12
Montana	22,211	22,979	94.5	96.9	0.54	0.60	0.41	0.55
Georgia	-	54	-	-	-	0.04	-	0.04
Illinois	1,842	1,817	100.0	99.3	0.00	0.00	0.00	0.00
Indiana	432	198	65.3	83.7	0.29	0.22	0.29	0.22
Michigan	6,713	6,838	97.0	100.0	0.07	0.06	0.07	0.06
Minnesota	6,131	6,084	90.1	93.1	0.76	0.81	0.76	0.81
Montana	5,894	6,508	100.0	100.0	0.70	0.81	0.70	0.81
Nebraska	-	0	-	-	-	0.00	-	0.00
Wisconsin	1,199	1,479	78.2	66.7	0.69	0.74	0.69	0.74
New Mexico	15,334	14,650	98.7	99.9	0.74	0.73	0.74	0.74
Arizona	4,890	4,816	99.6	100.0	0.00	0.00	0.00	0.00
Colorado	-	18	-	-	-	0.01	-	0.01
Illinois	111	-	-	-	0.43	-	0.43	-
Missouri	18	-	-	-	0.14	-	0.14	-
New Mexico	10,272	9,816	100.0	100.0	0.87	0.80	0.87	0.80
Wisconsin	43	-	-	-	0.39	-	0.39	-
North Dakota	15,533	15,706	100.0	98.0	1.05	1.13	1.05	1.14
Minnesota	1	-	100.0	-	0.87	-	0.87	-
North Dakota	14,192	14,353	100.0	97.8	1.00	1.00	1.00	0.99
South Dakota	1,340	1,353	100.0	100.0	1.02	1.02	1.02	1.04
Ohio	20,196	20,312	72.0	75.3	2.84	2.80	2.84	2.84
Alabama	408	1,698	93.9	100.0	2.01	1.50	2.01	1.50
Georgia	16	-	-	-	0.00	-	0.00	-
Indiana	44	7	-	-	2.21	1.00	2.21	1.00
Kentucky	197	108	55.2	59.0	2.99	2.16	2.99	2.16
Michigan	97	84	100.0	100.0	2.94	2.43	2.94	2.43
Missouri	24	-	-	-	2.10	-	2.10	-
New Jersey	14	-	-	-	1.06	-	1.06	-
New York	38	7	-	-	1.55	1.00	1.55	1.00
Ohio	16,828	16,414	71.2	72.6	2.80	2.60	2.80	2.60
Pennsylvania	1,418	1,383	97.6	95.2	3.08	3.01	3.08	3.01
West Virginia	1,112	611	53.1	35.2	3.08	3.00	3.08	3.04
Oklahoma	927	695	49.7	38.1	1.24	1.84	1.24	1.40
Missouri	36	231	100.0	66.9	3.64	3.00	3.64	3.00
Oklahoma	891	463	47.8	23.8	1.10	1.12	1.10	1.13
Pennsylvania	34,353	30,945	67.6	68.5	1.48	1.41	1.48	1.47
Delaware	229	305	39.8	81.3	1.06	1.06	1.06	1.06
Kentucky	11	18	-	49.4	2.03	1.98	2.03	1.97
Maryland	1,670	1,638	92.2	95.0	1.48	1.49	1.48	1.49
Massachusetts	735	533	31.2	10.1	1.09	1.00	1.09	1.00
Michigan	1,257	1,064	71.7	81.5	1.09	1.01	1.09	1.04
Minnesota	3	-	100.0	-	1.00	-	1.00	-
New Hampshire	100	119	100.0	-	1.04	0.99	1.04	0.99
New Jersey	26	25	-	-	0.95	1.00	0.95	1.00
New York	3,629	3,825	47.7	44.9	1.45	1.40	1.45	1.40
Ohio	2,191	2,081	59.4	54.5	1.72	1.61	1.72	1.61
Pennsylvania	23,021	20,241	70.3	69.5	1.49	1.43	1.49	1.43
West Virginia	358	196	9.4	16.0	1.61	1.00	1.61	1.00
Wisconsin	1,123	899	100.0	100.0	1.09	1.00	1.09	1.00
Tennessee	3,275	3,045	57.1	60.0	1.15	1.00	1.15	1.00
Alabama	566	491	13.3	34.2	0.67	0.67	0.67	0.67

See footnotes at end of table.

**Table 18. Origin of Coal Received at Electric Utility Plants by Destination,  
January-August 1990 (Continued)**

State of Origin and Imports State of Destination	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
<b>Tennessee</b>								
Florida .....	75	42	100.0	100.0	0.85	0.80	217	213
Georgia .....	1,054	832	58.8	87.1	1.08	.75	186	204
Kentucky .....	395	336	82.6	6.5	2.08	2.05	121	103
North Carolina .....	-	145	-	100.0	-	1.07	-	191
South Carolina .....	188	51	-	.2	1.17	1.16	164	151
Tennessee .....	997	1,347	77.7	68.8	1.14	1.11	121	115
<b>Texas</b>	32,817	32,461	99.8	91.8	1.58	1.54	106	103
Texas .....	32,817	32,461	99.8	91.8	1.56	1.54	106	103
<b>Utah</b>	10,410	9,622	89.1	92.2	.44	.43	117	128
Nevada .....	1,884	1,549	99.8	100.0	.47	.45	181	192
Texas .....	-	218	-	59.9	-	.45	-	171
Utah .....	8,526	7,855	88.7	91.8	.43	.43	102	113
<b>Virginia</b>	11,452	12,245	87.4	82.4	.88	.88	169	165
Delaware .....	197	21	51.9	100.0	.69	.69	197	201
Florida .....	598	535	95.0	100.0	.58	.58	243	232
Georgia .....	2,186	2,269	78.0	67.8	1.07	1.11	175	168
Illinois .....	-	3	-	-	-	.59	-	184
Kentucky .....	60	-	100.0	-	.58	-	158	-
Massachusetts .....	928	1,284	92.0	100.0	.95	.91	174	181
Michigan .....	113	398	100.0	100.0	1.09	.92	186	175
New Jersey .....	760	837	99.2	74.5	.58	.61	177	172
North Carolina .....	2,924	2,887	96.9	82.8	.84	.80	168	170
Ohio .....	-	21	-	-	-	1.06	-	183
South Carolina .....	682	673	93.0	88.5	.94	.97	161	157
Tennessee .....	798	887	100.0	81.4	1.39	1.44	131	123
Virginia .....	2,207	2,383	71.2	71.5	.70	.70	153	156
Wisconsin .....	-	37	-	-	-	.56	-	163
<b>Washington</b>	3,216	3,308	99.8	97.0	.93	.88	163	159
Washington .....	3,216	3,308	99.8	97.0	.93	.88	163	159
<b>West Virginia</b>	58,553	54,733	78.5	75.7	1.32	1.29	157	151
Alabama .....	4	36	-	100.0	.51	.60	151	124
Delaware .....	955	834	95.3	93.6	.68	.65	183	183
Florida .....	1,376	1,391	90.0	87.0	.94	.86	184	182
Georgia .....	966	867	100.0	100.0	.57	.53	246	241
Illinois .....	172	187	13.4	58.7	.51	.52	157	167
Indiana .....	264	216	67.8	42.3	.55	.81	206	179
Kentucky .....	2,037	1,634	39.8	42.6	.62	.67	129	116
Louisiana .....	159	117	100.0	100.0	.52	.50	205	202
Maryland .....	3,672	2,646	64.3	56.9	.98	.94	156	148
Massachusetts .....	974	1,088	81.8	87.3	.98	.93	169	154
Michigan .....	3,853	3,931	77.4	78.0	.67	.58	171	182
Minnesota .....	2	-	100.0	-	.95	-	169	-
Mississippi .....	-	24	-	-	-	1.20	-	144
New Hampshire .....	572	496	77.0	-	1.65	1.67	176	168
New Jersey .....	1,175	1,316	86.6	76.1	1.01	1.03	180	176
New York .....	2,922	2,274	88.6	92.3	1.57	1.48	161	163
North Carolina .....	3,615	2,933	80.9	85.4	.64	.62	178	174
Ohio .....	8,618	8,285	76.6	70.9	1.50	1.48	148	139
Pennsylvania .....	6,240	6,273	95.8	89.8	2.35	2.17	146	140
South Carolina .....	14	11	63.5	36.5	.78	1.15	180	178
Tennessee .....	-	18	-	100.0	-	2.09	-	139
Virginia .....	1,152	2,018	73.0	35.2	.75	.67	156	147
West Virginia .....	19,679	18,118	77.1	78.2	1.44	1.47	150	142
Wisconsin .....	133	17	-	-	1.24	1.62	164	175
<b>Wyoming</b>	115,691	108,214	85.8	89.2	.44	.45	134	138
Alabama .....	216	-	-	-	.44	-	170	-
Arkansas .....	7,048	7,646	100.0	100.0	.39	.39	164	163
Colorado .....	3,541	3,764	100.0	95.7	.39	.37	106	101
Georgia .....	971	24	6.0	-	.39	.40	134	166
Illinois .....	2,194	2,412	95.1	98.7	.42	.49	293	290
Indiana .....	8,130	4,122	82.6	70.7	.39	.45	128	148
Iowa .....	8,889	7,825	69.5	88.7	.43	.43	105	119
Kansas .....	9,316	9,347	97.2	91.1	.41	.42	123	121
Kentucky .....	113	-	34.5	-	.35	-	124	-
Louisiana .....	4,852	5,948	100.0	100.0	.55	.55	180	170
Michigan .....	1,371	505	36.9	-	.33	.34	110	119
Minnesota .....	4,676	4,054	99.1	99.6	.30	.31	125	120
Missouri .....	4,781	4,590	65.9	78.2	.42	.44	97	95

See footnotes at end of table.

**Table 18. Origin of Coal Received at Electric Utility Plants by Destination,  
January-August 1990 (Continued)**

State of Origin and Imports State of Destination	Receipts (thousand short tons)		Contract Receipts (percent)		Sulfur Content (lbs. sulfur per MM Btu)		Price (cents per MM Btu)	
	1990	1989	1990	1989	1990	1989	1990	1989
<b>Wyoming</b>								
Nebraska .....	5,719	4,887	76.9	88.5	0.42	0.42	77	85
Nevada .....	433	199	100.0	100.0	.44	.55	202	198
Oklahoma .....	8,826	9,301	92.7	95.4	.45	.45	139	136
Oregon .....	223	-	100.0	-	.37	-	110	-
Texas .....	22,193	23,290	94.9	84.9	.44	.43	184	184
Washington .....	348	437	-	-	.35	.41	127	124
Wisconsin .....	7,096	6,549	68.1	87.4	.41	.40	112	129
Wyoming .....	14,974	14,215	83.2	90.6	.61	.59	84	85
<b>Imported Coal</b> .....	<b>898</b>	<b>772</b>	<b>62.4</b>	<b>59.4</b>	<b>.60</b>	<b>.55</b>	<b>175</b>	<b>179</b>
Canada .....	34	-	-	-	.97	-	181	-
New Hampshire .....	34	-	-	-	.97	-	181	-
<b>Colombia</b> .....	<b>543</b>	<b>729</b>	<b>88.2</b>	<b>62.9</b>	<b>.65</b>	<b>.56</b>	<b>178</b>	<b>181</b>
Florida .....	479	459	100.0	100.0	.65	.61	177	173
Georgia .....	-	23	-	-	-	.54	-	173
Maryland .....	-	247	-	-	-	.47	-	195
Massachusetts .....	64	-	-	-	.61	-	179	-
<b>Venezuela</b> .....	<b>321</b>	<b>43</b>	<b>25.3</b>	<b>-</b>	<b>.48</b>	<b>.36</b>	<b>169</b>	<b>147</b>
Florida .....	170	37	-	-	.53	.36	153	141
Massachusetts .....	70	-	-	-	.48	-	181	-
New Hampshire .....	81	-	100.0	-	.39	-	189	-
New Jersey .....	-	6	-	-	-	.37	-	188
<b>U.S. Total</b> .....	<b>523,883</b>	<b>496,015</b>	<b>82.8</b>	<b>83.1</b>	<b>1.29</b>	<b>1.27</b>	<b>146</b>	<b>144</b>

Notes: Totals may not equal sum of components because of independent rounding. MM Btu represents million Btu.  
Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

# State Coal Profile: Montana

## Total Area of State:

147,138 square miles

## Area Underlain by Coal:

51,300 square miles

## Demonstrated Reserve Base of Coal: (January 1, 1990)

120 billion short tons  
(25 percent of U.S. total)

## First Year of Documented Coal Production:

1880 (224 short tons)

## Peak Year of Coal Production:

1988 (39 million short tons)

## 1989 Coal Production:

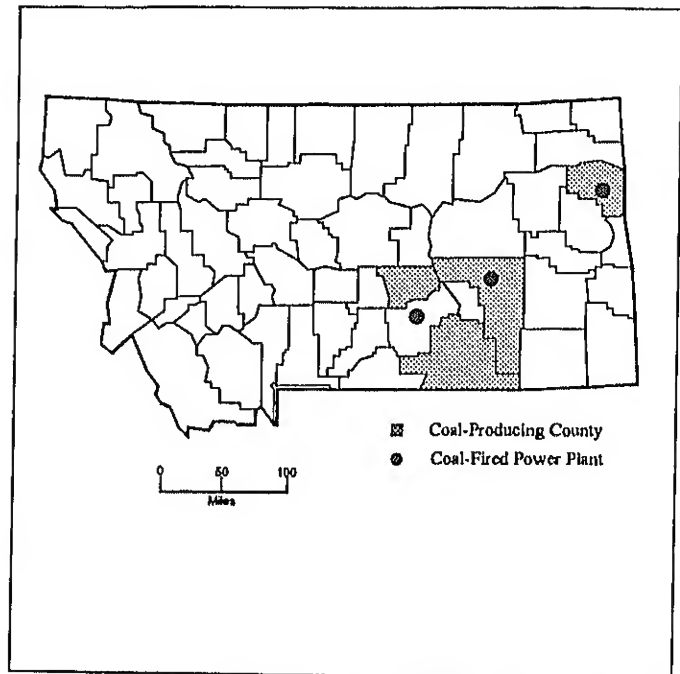
38 million short tons  
(4 percent of U.S. total)

## 1989 f.o.b. Mine Price:

\$10.27 per short ton  
(U.S. average = \$21.82)

## 1989 Coal Consumption:

10 million short tons  
(1 percent of U.S. total)



	<u>Number</u>	<u>Percentage of U.S. Total</u>
Number of Mines (1989) .....	9	<1
Underground .....	0	--
Surface .....	9	<1
Number of Miners (1989) (at mines producing more than 10,000 short tons) .....	682	<1
Underground .....	0	--
Surface .....	682	<1
Average Quality of Utility Coal Receipts (1989)	<u>Montana</u>	<u>U.S. Average</u>
Heat Content (million Btu per short ton) .....	17.0	20.9
Sulfur Content (percent by weight) .....	0.7	1.3
Ash Content (percent by weight) .....	9.5	9.9



About 35 percent of Montana is underlain by coal-bearing rocks. The coal deposits occur in an area of more than 50,000 square miles, and are widely distributed throughout the State. Coal, the leading mineral commodity in the State in 1989, ranked slightly higher in value than crude oil and accounted for more than one-fourth of the total value of all minerals produced. In addition, coal production generated more than \$60 million in State severance taxes, and \$28 million in royalties from Federal and Indian leases.

Montana's demonstrated reserve base of coal, which amounts to over 120 billion short tons, is the largest in the Nation. This coal consists of subbituminous, bituminous, and lignite deposits. However, almost all of the output is now subbituminous coal, with a small amount of lignite. As mined, the coal has a heat content ranging from 13 to 22 million Btu per short ton, a sulfur content generally less than 1 percent by weight, and an ash content from 3 to 11 percent by weight. Of the eight coalbeds presently mined, the Rosebud coalbed is the major source of production. The bed is located in the Powder River Basin, the most important coal-producing area in the State. The Powder River Basin, located in the southeastern part of Montana, has some of the thickest coalbeds in the Nation, ranging from 15 to 80 feet in thickness. The Rosebud, which accounts for more than half of the State's production, ranges up to 30 feet in thickness.

Coal was reportedly first used in Montana in 1807, when a Spanish fur trader used it as heating fuel for his outpost. The industry began on a small scale in 1880, with a little more than 200 short tons mined. Coal production in 1889 was more than 350,000 short tons, and by 1895 it averaged over one million short tons per year. By 1900, the coal mining industry was well established in the State, with coal being used primarily for fueling railroad engines and for heating homes. Production rose to nearly 5 million short tons in 1918, after which it dropped to an average of 3 million short tons annually. The influence of World War II created a slight increase in production in the 1940's, raising the average annual production to 4 million short tons. In the 1950's, Montana coal production declined significantly as coal-fired locomotives were replaced by diesel locomotives. In the following decade, the State's coal-mining industry declined, producing less than a total of 4 million short tons of coal during that entire period.

The 1970's brought about a significant increase in Montana's coal production. The State produced 3 million short tons of coal in 1970, and by 1975 it reached 22 million short tons. The increase in production was due largely to the Colstrip coal-fired power plant, which began operating in 1975 with one generating unit. Over the next decade, coal production continued to rise as the plant added additional generating units. During this period, annual production averaged 30 million short tons. Coal production in the State has remained relatively stable since.

In 1987, the Montana legislature enacted H.B. 252 which sought to increase coal production by lowering coal severance taxes, the highest in the Nation. A goal of 32 million short tons of coal production in the State was set for fiscal year 1988, and if met, the severance tax would be lowered. In that period, the coal industry produced more than 38 million short tons, exceeding the legislated goal and setting a new coal production record. As a result, the tax dropped from 30 to 25 percent on July 1, 1988, and to 20 percent on July 1, 1990. The tax will be lowered again to 15 percent on July 1, 1991. For the coal industry, the decade of the eighties has been the most productive, averaging more than 30 million short tons of coal annually. In 1989 coal output was nearly 38 million short tons, ranking Montana 8th among the 27 coal-producing States. Cumulative coal production through 1989 was nearly 700 million short tons.

Coal is mined in four of the State's 56 counties at nine surface mines, with more than 95 percent of the output coming from Big Horn and Rosebud Counties. Large-scale surface mining in Montana began in the 1920's. Although underground mining has been extensive in the past, all production is currently from surface mines. In 1989, Montana had five of the largest coal mines in the country. The Rosebud mine, the third largest coal mine in the United States, is operated by Western Energy Company. The mine produced nearly 14 million short tons of coal, accounting for over one-third of the State's output. By contrast, the Knife River Savage Mine, the State's only lignite mine, which is operated by the Knife River Mine Company, produced about 200,000 short tons. In 1989, more than 60 percent of the State's production was from Federal coal leases, with the balance from Indian and other coal leases. Montana's surface mine productivity, averaging 19 short tons per miner per hour, is the second highest in the Nation, following Wyoming.

Of the 38 million short tons of coal produced in Montana in 1989, the State consumed a total of 10 million short tons. Electric power plants accounted for over 95 percent of total coal consumption, while most of the remainder was used by industries, such as sugar refineries and cement plants. About 26 million short tons of Montana coal was distributed to power plants in eight other States. Michigan and Minnesota together accounted for more than three-fourths of those shipments. Less than 1 million short tons of coal were exported.

In 1989, the six coal-fired units in Montana had a net summer capability of 2,260 megawatts. These units accounted for over 40 percent of the generating capability in the State, with more than 50 percent of the generating capability coming from hydroelectricity. In 1989 the coal-fired units generated over 16 billion kilowatthours of electricity. Colstrip, the largest power plant in the State, accounted for over 90 percent of the coal-fired generating capability, and is owned and operated by the Montana Power Company. This plant, one of the larger power plants in the West, is located in Rosebud County, and has four coal-fired generating units with a total capability of 2,060 megawatts. Since the early 1980's, coal's share of electricity generation in the State has increased from one-third to two-thirds of the total.

Currently three projects are underway in Montana to help use the abundant coal reserves in the State as well as in the Nation. One project is aimed at developing magnetohydrodynamic (MHD) power generation. With MHD, coal is burned at high temperatures, and the combustion gases are used as a conductor in a magnetic field to produce electricity. Existing coal-fired power plants have plant efficiencies of 32 to 35 percent, but an MHD power plant would have an efficiency of 50 to 60 percent. The MHD project, located in Butte, is part of the Department of Energy's Clean Coal Technology (CCT) Program, a joint industry and government venture to demonstrate the clean and efficient burning of coal.

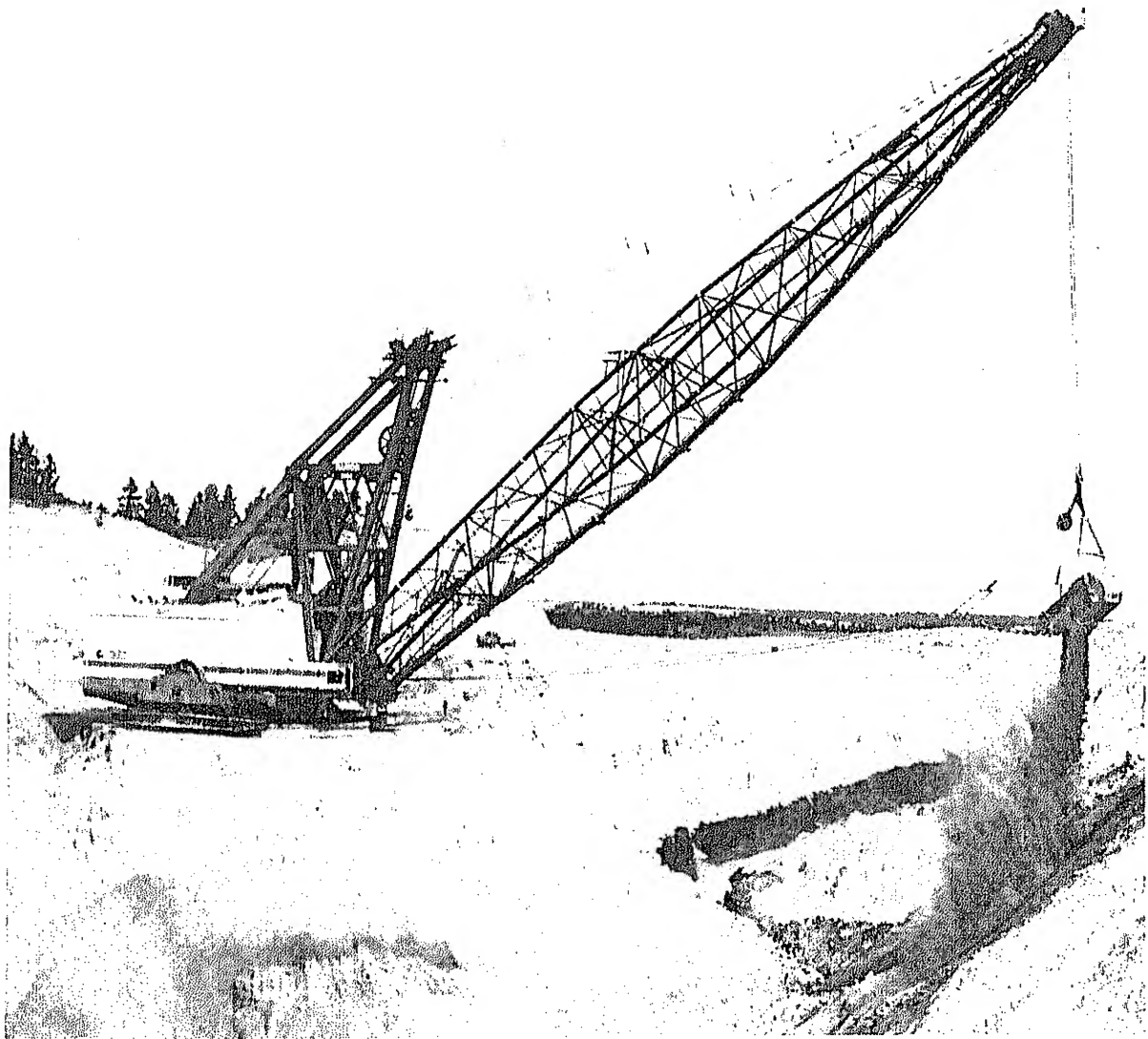
A second project, also part of the CCT Program, is for the construction of a demonstration coal processing plant at Western Energy's Rosebud mine, near Colstrip in southwestern Montana. The plant will use a novel coal-cleaning process that will increase the heating value of coal by reducing its moisture content. The new plant will be integrated with existing coal crushing and other facilities at the mine. If the project is

successful, Western Energy plans to have a privately-financed commercial-scale plant with a capacity of 1 to 3 million short tons per year operating by 1997. The third project, which began commercial operations in May 1990, is the Colstrip Refuse Coal Project, a joint venture between the Pacific Gas and Electric Company and Bechtel Development Company. It is the State's first waste-coal power plant, and the first of its type in the Rocky Mountain Region to use a circulating fluidized bed boiler. The 35 MW plant will supply electricity to the Montana Power Company under a 35-year contract. Western Energy Company will truck waste coal from its Rosebud mine to the plant, which is required by Federal permit to burn at least 75 percent waste coal.

Montana's coal production is expected to remain relatively stable during the next few years, with most of the coal used for generating electricity. The passage of the 1990 Clean Air Act Amendments, however, could improve the prospects for further development of the State's vast coal reserves, most of which have a low-sulfur content. Future prospects also include larger exports, particularly to Asia, where test burns are currently being conducted. In addition, the development of coalbed methane in the Powder River Basin in Wyoming could extend into Montana.

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*This dragline is in operation at Montana's Rosebud Mine, which is the third-largest coal producing mine in the Nation.*

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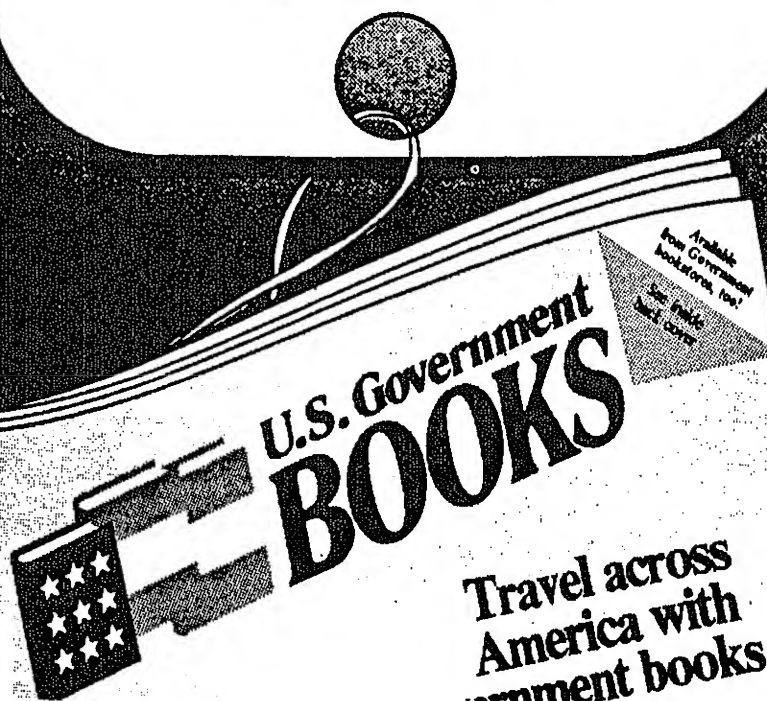
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